

## SECTION III AFFECTED ENVIRONMENT

### 3.1 LAND USE AND RELATED CHARACTERISTICS

This section provides an overview of the existing condition of land use and related characteristics. Subsections address the geographical setting; a summary of land use planning and zoning; land use density patterns; and, an overview of each land use classification including: agricultural, institutional, commercial/residential and cemeteries. The existing transportation framework is also summarized.

For direct impacts, the STH 26 study area is defined as those jurisdictional units of government in Rock, Jefferson, and Dodge Counties that have a potential to be directly affected by one or more of the study alternatives. These include the cities, villages, and towns that have an asterisk next to their name on the list below.

For indirect impacts, the STH 26 study area is further defined and agreed upon utilizing the guidance of the reference document, Indirect and Cumulative Effects Analysis for Project Induced Development: Technical Reference Guidance Document (WisDOT 1999). This document states that the ‘project study area’ can be defined as “...the geographic area that may be affected by the project’s indirect or cumulative effects analysis for project induced land development.” The document goes on to outline methods for identifying the study area. The methods from this document that were used to determine the STH 26 study area for indirect impacts include ‘Commutershed Analysis’ and the ‘Panel of Experts.’

Commutershed is defined by WisDOT as “...those areas within a predetermined commuting range or threshold to the identified major destination.” Within this study area, the municipalities of Watertown, Johnson Creek, Jefferson, Fort Atkinson, Milton, and Janesville have been designated as major destinations.

The STH 26 Panel of Experts consisted of both local and outside experts chosen for their knowledge of both planning principles and the local area through which the project passes. The panel participated in a focused survey where they identified potential impacts of the DEIS alternatives. The Panel of Experts method has a multi-level purpose of validating the study area, obtaining reliable expert opinion data on each alternative, helping to build consensus between consultants and local/regional officials, and helping to raise local awareness of the project scope.

The list below includes jurisdictions that have the potential to be either directly or indirectly affected as part of the STH 26 study area. For planning purposes, the study area was divided into three segments that are referred to as the South Segment, Central Segment, and the North Segment. [Figure 3.1.1 – 1](#) illustrates the STH 26 study area.

#### **Rock County**

The Cities of: Janesville, Milton\*, Edgerton

The Towns of: Rock, La Prairie, Harmony\*, Janesville, Fulton, Milton\*, Lima

### **Jefferson County**

The Cities of: Fort Atkinson\*, Lake Mills, Waterloo, Jefferson\*, Watertown\*

The Villages of: Johnson Creek\*, Palmyra, Sullivan

The Towns of: Sumner, Koshkonong\*, Cold Spring, Palmyra, Sullivan, Hebron, Jefferson\*, Oakland, Lake Mills, Aztalan\*, Farmington\*, Concord, Ixonia, Watertown\*, Milford, Waterloo

### **Dodge County**

The Villages of: Clyman, Hustisford, Reeseville, Lowell

The Towns of: Shields\*, Emmett\*, Lebanon, Clyman\*, Lowell, Hustisford

\* Jurisdictions that have a potential to be directly impacted

#### **3.1.1 Geographical Setting**

The STH 26 study area is a relatively homogeneous region in terms of its geographic characteristics. In general, this region can be described as rolling open agricultural lands interspersed with environmental corridors and populated settlements. The Rock River is a key geographic feature that flows north to south through the STH 26 study area. Existing land uses are illustrated in [Figures 3.1.1-2 through 3.1.1-7](#).

Farmland and woodlands together comprise 68 percent of the total land area within Jefferson County and 78 percent in Dodge County. Although data are not available for Rock County generalized land uses, field inspection of the study area indicates that Rock County exhibits similar land usage to that of the other two counties.

Environmental corridors include wetlands, streams and rivers, and woodlots, all of which are often associated with the glacial drumlins that are prevalent in the area. The drumlin fields and associated glacial features of the types found within the study area are found in only few parts of the world and are geologically significant.

#### **3.1.2 Land Use Planning and Zoning**

None of the three counties in the study area are part of a regional planning organization. Nineteen land use plans have been adopted for use within the study corridor and another seven are in various stages of completion.

Local (town, city and village) and county land use plans for the STH 26 study area generally emphasize preserving the area's rural character and encouraging new development within or adjacent to existing development areas (see [Table 4.1.1](#)). Most of the local plans support new industries and other types of economic development within planned long-range urban service areas where public water and sanitary sewer service would be available. Twenty-year urban service boundaries have been delineated for all of the cities and villages within the STH 26 corridor study area.

##### **3.1.2.1 South Segment**

The South Segment extends from IH 90 to south of the City of Fort Atkinson. Local governments with planning jurisdiction in this area include the Town of Harmony, Town of Koshkonong, Town of Milton, Town of Sumner, City of Janesville and City of Milton. The South Segment includes portions of Rock

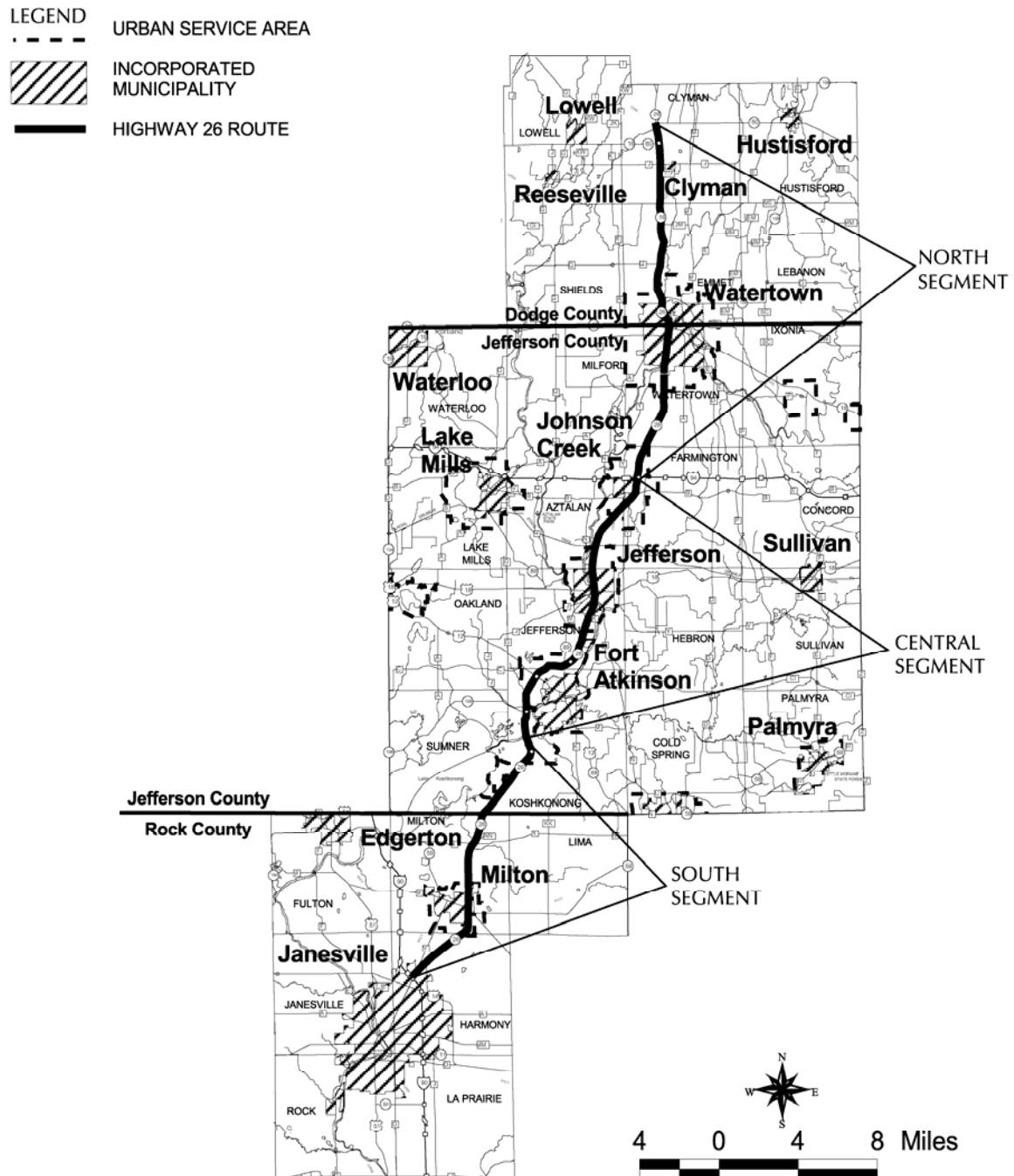


Figure 3.1.1-1 Project Study Area

County and Jefferson County, both of which have land use controls affecting the area. Table 4.1.1 indicates which communities have plans.

In 1999, the City of Milton adopted its Comprehensive Master Plan that defines the City's long-range growth boundary and identifies future planned land uses both within the existing municipal boundaries and within the City's growth area. The City of Milton plan also addresses preserving the rural character and agricultural and natural resources of areas outside the City's urban service area boundary, but within the City's 1.5 miles (0.8 km) extraterritorial jurisdiction. The City's recently adopted plan, along with its zoning and land division regulations, provides effective land use planning and growth management controls for the Milton area.

The City of Janesville adopted a Comprehensive Master Plan in 1992. It includes land use recommendations for all areas within the City's 20-year Urban Service Area. Janesville is currently preparing a neighborhood development plan for lands in the northeast section of the Janesville Urban Service Area, extending north to the Milton General Planning Area boundary. Janesville is coordinating planning efforts with the Town of Harmony, Rock County, and the City of Milton.

The Town of Harmony is also beginning the process of preparing a land use plan, which will promote farmland preservation and maintain a rural corridor to separate the future Janesville and Milton growth areas along the STH 26 corridor.

The Towns of Milton, Koshkonong and Sumner have all adopted land use plans that emphasize preserving the rural character of the central and northern portions of the South Segment outside the City of Milton. Rock County has been providing assistance to the towns in the county to develop land use plans. Rock County's land use plan will be a compilation of the township plans. Jefferson County's Comprehensive Plan was adopted in 1999.

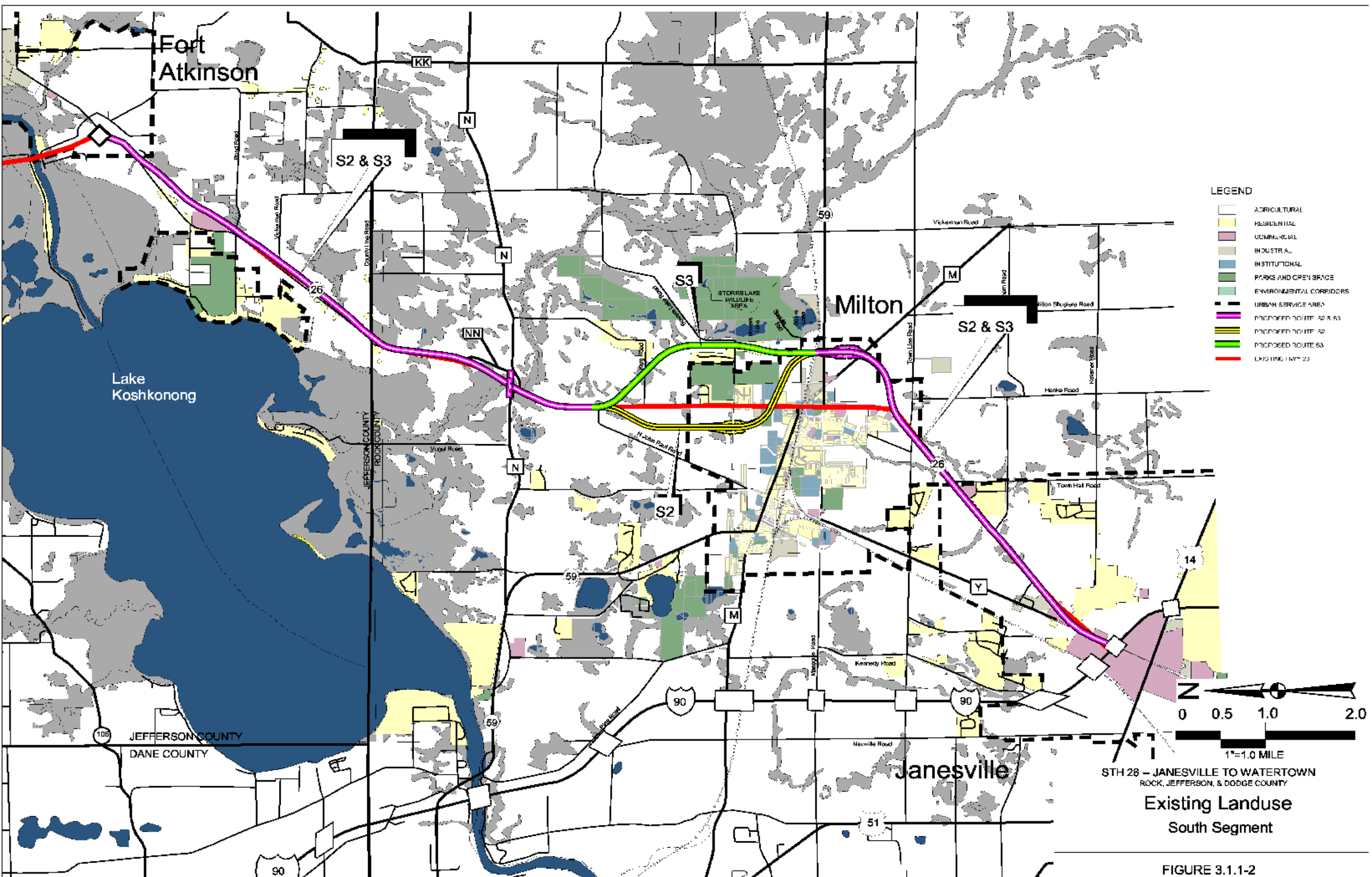
### **3.1.2.2 Central Segment**

Local governments with planning jurisdiction in the Central Segment include the Town of Aztalan, Town of Farmington, Town of Jefferson, Town of Hebron, Town of Koshkonong, City of Fort Atkinson, City of Jefferson, and Village of Johnson Creek. The Central Segment is entirely within Jefferson County, which has land use controls affecting the area. Table 4.1.1 indicates which communities have plans.

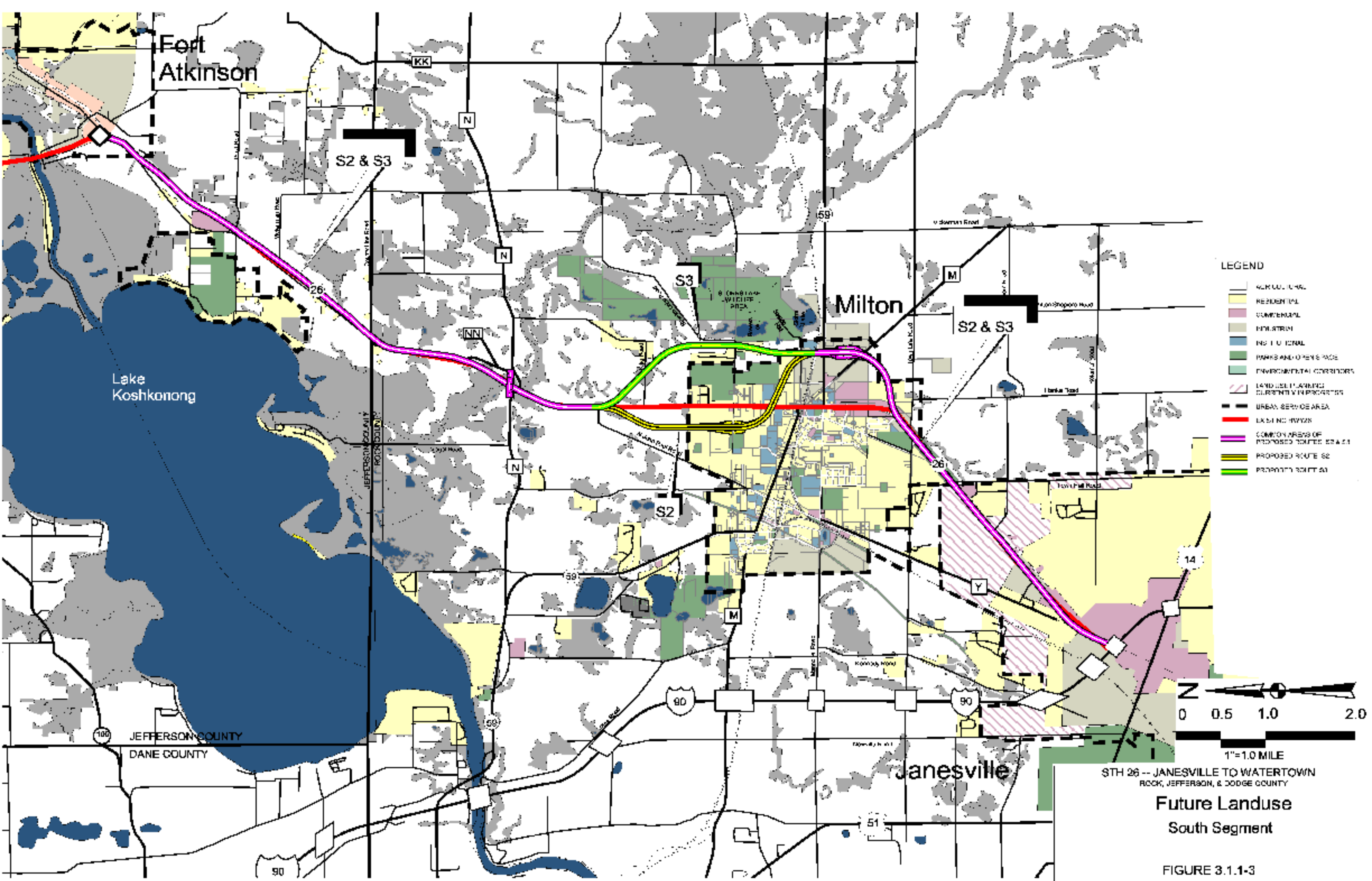
The cities of Fort Atkinson and Jefferson and the Village of Johnson Creek have recently adopted land use plans that define each of the communities' long-range urban service area boundaries and identify future planned land uses both within the existing municipal boundaries and within the planned urban service areas. Each of the municipal plans also addresses preserving the rural character and agricultural and natural resources of areas outside each community's long-range growth boundary within the statutory extraterritorial jurisdictions. These recently adopted plans, along with municipal zoning and land division regulations, provide effective land use planning and growth management controls for the cities of Fort Atkinson and Jefferson and the Village of Johnson Creek in the Central Segment.

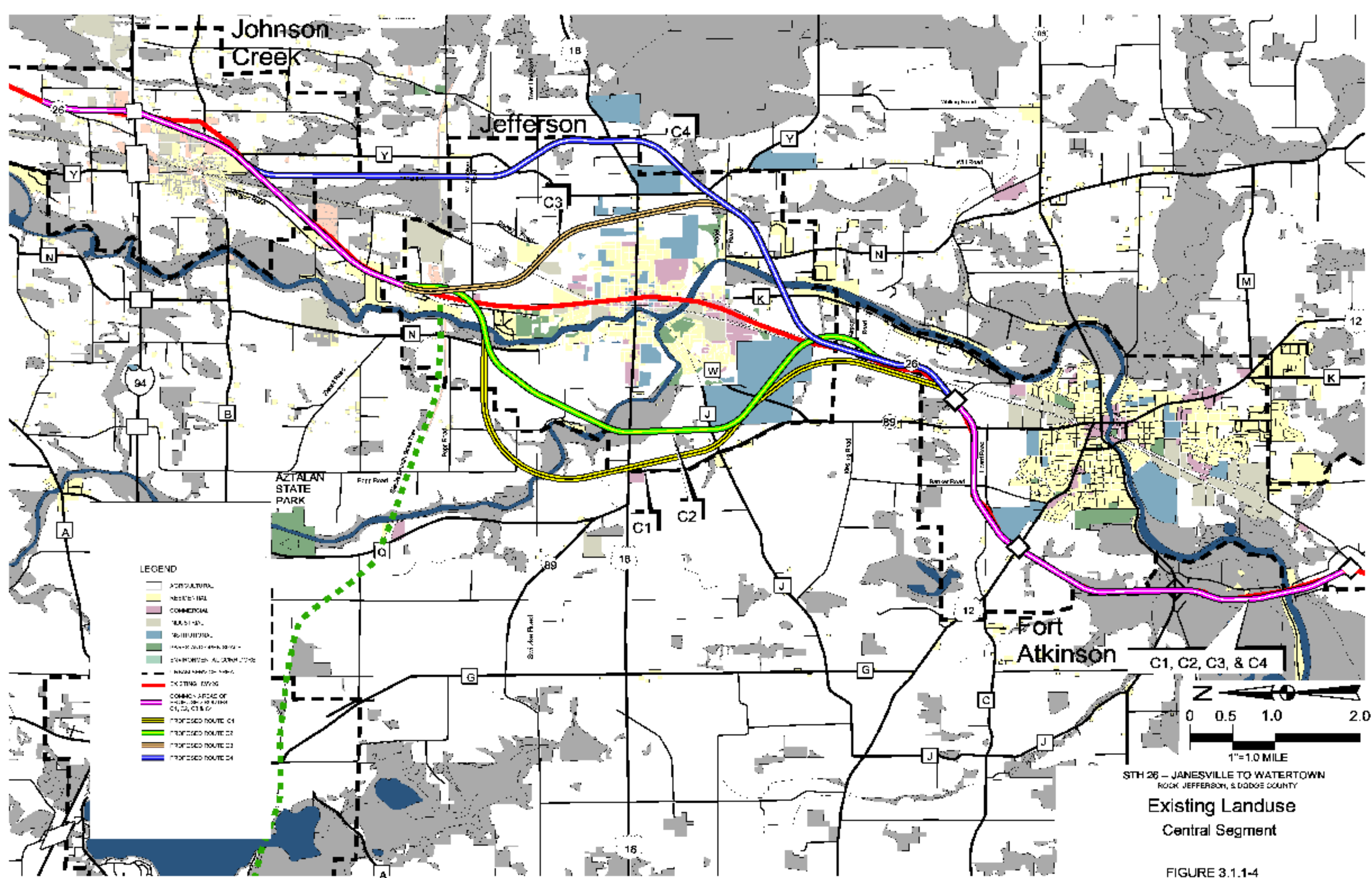
In addition to the plans for each of the incorporated municipalities, each of the towns in Jefferson County is included within the Jefferson County Agricultural Preservation and Land Use Plan, which was adopted in 1999. The Town of Ixonia, Town of Koshkonong, and Town of Oakland have adopted land use plans.

The Jefferson County Agricultural Preservation and Land Use Plan was adopted in October of 1999. It includes a Rail System Improvements section, a key objective of which is to preserve all existing rail service connections, if economically feasible. Jefferson County emphasizes that this objective is essential

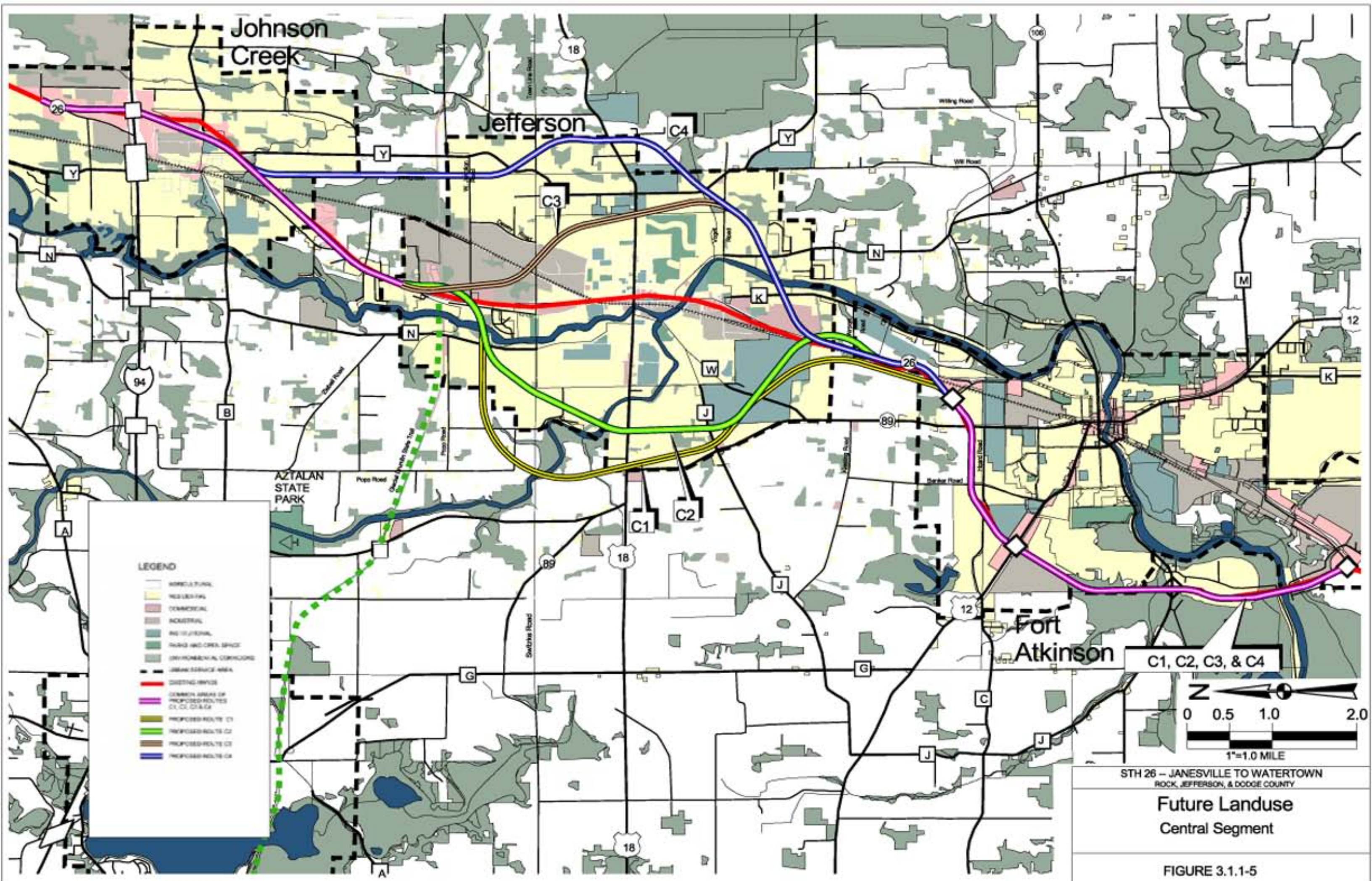




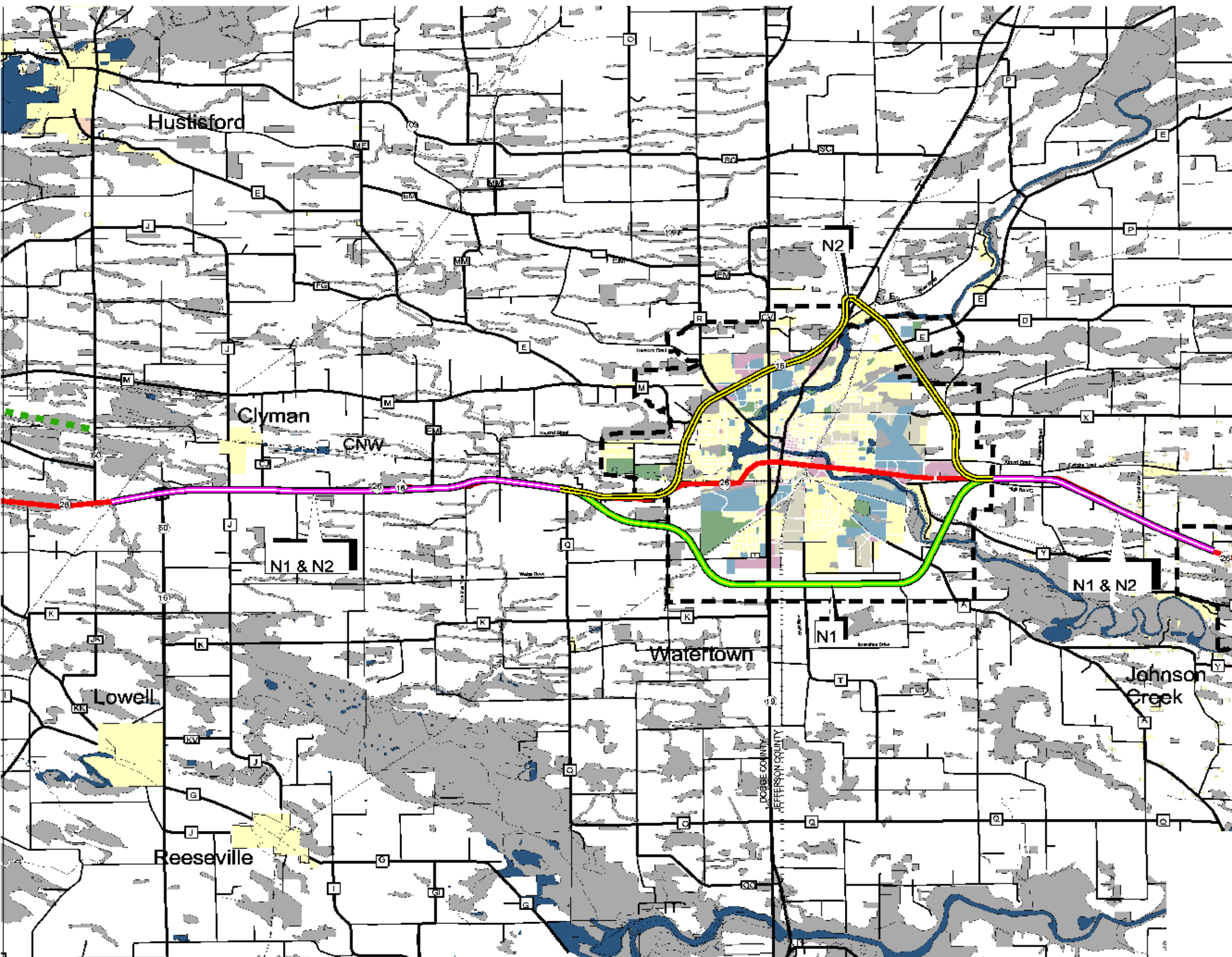






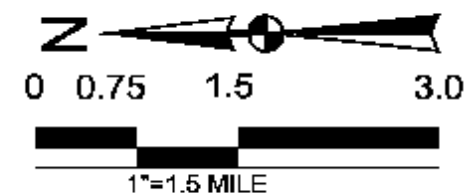






LEGEND

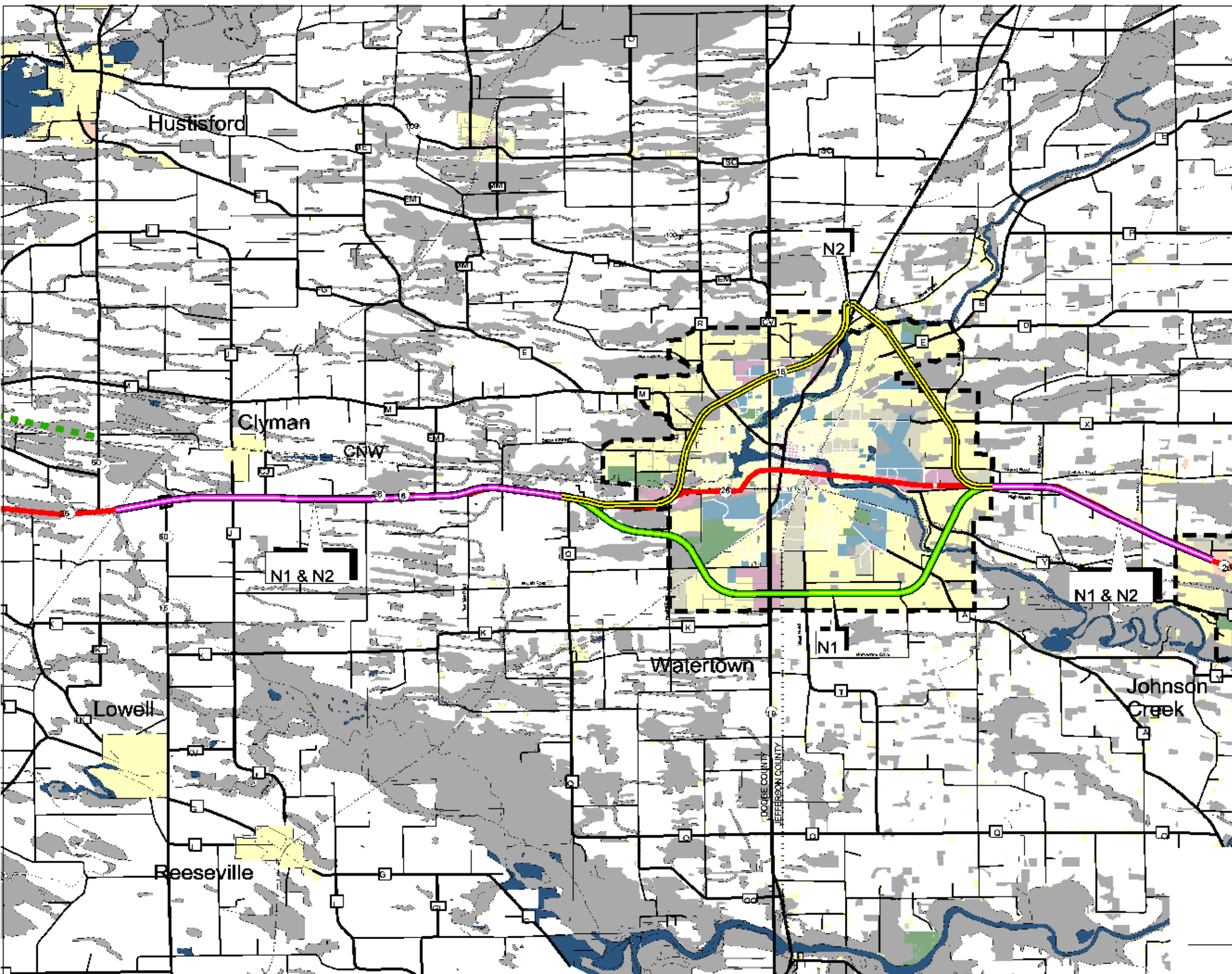
- AGRICULTURAL
- RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- INSTITUTIONAL
- PARKS AND OPEN SPACE
- ENVIRONMENTAL CORRIDORS
- URBAN SERVICE AREA
- EXISTING HWY 26
- COMMON AREAS OF PROPOSED ROUTES N1 & N2
- PROPOSED ROUTE N1
- PROPOSED ROUTE N2



STH 26 -- JANESVILLE TO WATERTOWN  
ROCK, JEFFERSON, & DODGE COUNTY

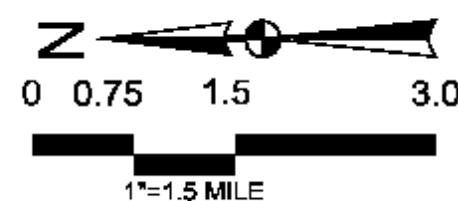
Existing Landuse  
North Segment

FIGURE 3.1.1-6



LEGEND

- AGRICULTURAL
- RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- INSTITUTIONAL
- PARKS AND OPEN SPACE
- ENVIRONMENTAL CORRIDORS
- URBAN SERVICE AREA
- EXISTING - HWY 26
- COMMON AREAS OF PROPOSED ROUTES N1 & N2
- PROPOSED ROUTE N1
- PROPOSED ROUTE N2



STH 26 -- JANESVILLE TO WATERTOWN  
ROCK, JEFFERSON, & DODGE COUNTY

Future Landuse  
North Segment

FIGURE 3.1.1-7



to maintaining the economic competitiveness of communities and business parks. The Transportation Overview section of the plan also states that “over the next twenty-year planning period, construction of a STH 26 bypass is one of the key new highway construction projects proposed by WisDOT.”

The County long-range transit planning considerations include 1) resumption of intercity bus service between communities in Jefferson County with connections to Milwaukee, Madison and Chicago; 2) municipal intracity transit programs for the elderly and handicapped; 3) regional commuter rail and light rail service to provide a connection between Jefferson County and the Milwaukee area; 3) provision of van pools and other forms of private transit service to key businesses and employment centers by major employers. If chosen for further consideration, these long-range plans could be coordinated with STH improvements to enhance transit service in Jefferson County.

Jefferson County adopted the Jefferson County Bikeway/Pedestrianway Plan in 1996. The Plan recommends improvements to the Glacial Drumlin Trail. The Glacial Drumlin Trail is a 47-mile (75-km) trail developed on an abandoned railroad grade that runs east-west through the central portion of Jefferson County. There is a closed area along the trail: a 4-mile (6.4-km) gap north of the City of Jefferson. The Glacial Drumlin Trail ends at the STH 26 right-of-way approximately 3,000 feet (914 m) north of the City of Jefferson, and resumes 4 miles (6.4 km) to the east at Switzke Road. There are no designated routes around this closed section; however users of the trail generally follow public roads within the gap.

In addition, the County bike and pedestrian plan recommends: 1) designating and signing bicycle routes throughout Jefferson County on roads with a low volume of automobile and truck traffic; 2) constructing paved shoulders on segments of highways with higher traffic volumes as these roads and highways are resurfaced or reconstructed; and, 3) constructing a system of multiuse trails separated from roadways.

### **3.1.2.3 North Segment**

Local governments with planning jurisdiction in the North Segment include the Town of Emmet, Town of Farmington, Town of Milford, Town of Watertown, City of Watertown, and the Village of Johnson Creek. The North Segment includes portions of Jefferson County and Dodge County, both of which have recently adopted land use plans affecting the area. Table 4.1.1 indicates which communities have plans.

The City of Watertown Comprehensive Master Plan recognizes that STH 26 has been experiencing increasing traffic volumes that warrant transportation improvements in Watertown. The 2003 four-lane improvements on the south side of Watertown addressed local short-term needs for STH 26. Capacity expansion north of Milwaukee Street is restricted by the Historic District and limited right of way width. The 2003 improvements do not address the purpose and need of the project as a regional transportation route. The plan notes that past discussions regarding a potential STH 26 bypass around the City have primarily focused on a westerly bypass in light of significant environmental constraints east of the City (i.e. wetlands, the Rock River, and tight drumlin alignments).






Both the recently adopted Jefferson County and Dodge County land use plans support preserving the rural and agricultural character of the areas outside the City of Watertown’s long-range urban service area.

### **3.1.3 Land Use Density**

Land use density for the study area follows two typical patterns: a land use density pattern for urban areas including cities and villages, and a land use density pattern for rural areas including towns. Moving south to north along the study corridor, land use density gradually decreases in both the urban and rural

areas. [Table 3.1.3](#) summarizes land use density for the rural and urban areas of the three study segments. [Figure 3.1.3](#) illustrates land density patterns for the study area.

### Legend

(Persons Per Square Mile)	
	Less Than 100
	100-500
	500-1000
	1001-2000
	2000 and Greater

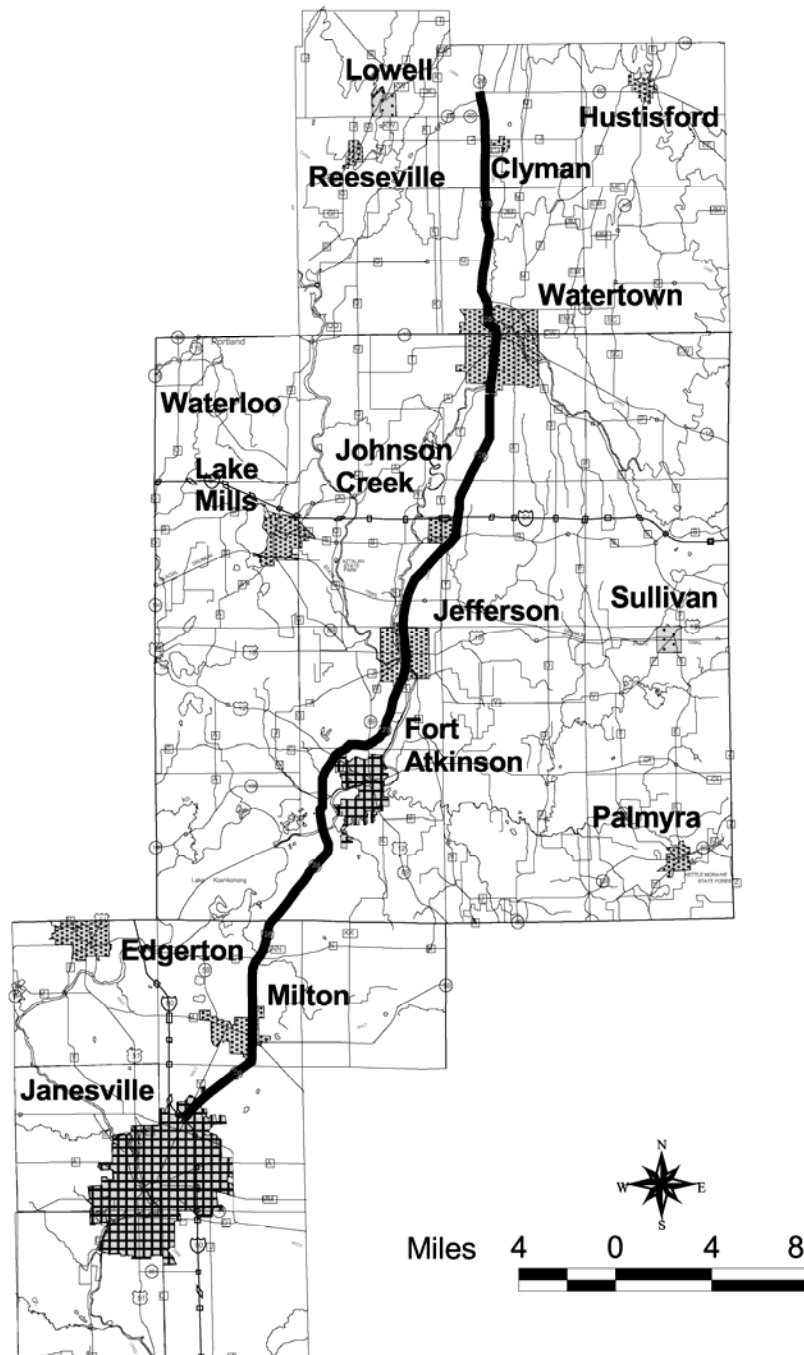


Figure 3.1.3 Land Use Density



Current and pending land use plans for the jurisdictions in the study area generally include: 1) recommendations by cities that growth occur in a compact manner utilizing urban infill rather than extensive, sprawling development, and 2) recommendations by unincorporated towns and counties that limited development and large minimum lot sizes be promoted. If the recommendations are followed, it is foreseeable that the current land use density pattern will continue.

### 3.1.4 Agricultural Land Use

Agricultural land use dominates the study area. Agricultural land is concentrated in the study area towns. Farms in the area primarily produce corn and soybeans, cattle, hogs (for breeding) and pigs (for meat production).

<b>TABLE 3.1.3 LAND USE DENSITY</b>		
<b>Civil Division</b>	<b>STH 26 Land Area in Square Miles</b>	<b>STH 26 Persons Per Square Mile</b>
<b>Portions of Rock County in Study Area</b>	250	307
Rural Areas <sup>1</sup>	220	72
Urban Areas <sup>2</sup>	30	2,030
<b>Portions of Jefferson County in Study Area</b>	559	129
Rural Areas <sup>3</sup>	531	50
Urban Areas <sup>4</sup>	28	1,626
<b>Portions of Dodge County in Study Area</b>	185.9	46
Rural Areas <sup>5</sup>	184	34
Urban Areas <sup>6</sup>	1.9	1,228

<sup>1</sup>Includes Towns of Fulton, Harmony, Janesville, La Prairie, Lima, Milton, and Rock.

<sup>2</sup>Includes Cities of Edgerton, Janesville, and Milton.

<sup>3</sup>Includes Towns of Aztalan, Cold Spring, Concord, Farmington, Hebron, Ixonia, Jefferson, Koshkonong, Lake Mills, Milford, Oakland, Palmyra, Sullivan, Sumner, Waterloo, and Watertown.

<sup>4</sup>Includes Villages of Johnson Creek, Palmyra, Sullivan; includes Cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo and Watertown.

<sup>5</sup>Includes Towns of Clyman, Hustisford, Lebanon, Lowell, and Shields.

<sup>6</sup>Includes Villages of Clyman, Hustisford, Lowell, and Reeseville.

Table 3.1.4 profiles agriculture in Rock, Jefferson and Dodge Counties. From 1992 to 1997, the total amount of farmland increased in Rock and Jefferson Counties, but decreased in Dodge County. In all three counties, average farm size and the market value of agricultural products sold increased, while the number of full-time farms decreased.

Exclusive agricultural zoning is part of the Wisconsin Department of Revenue's Wisconsin Farmland Preservation Program. Local governments can utilize exclusive agricultural zoning to provide tax relief for farmers who choose to participate.

Rock County is developing its County Farmland Preservation Update. In addition, it is working with towns to complete their land use plans for inclusion in the Rock County Comprehensive Development Plan. Existing STH 26 and the project alternatives travel through the Towns of Harmony and Milton. The Town of Harmony is working on completing its Land Use Plan. A major element of this plan is agricultural preservation, including land between the City of Janesville and the City of Milton, along the existing STH 26 corridor. The draft Town of Milton Land Use Plan designates exclusive agricultural land use and zoning areas. Those areas that would be most impacted by the STH 26 project include land along the existing STH 26 corridor north of the City of Milton and extending to the Town of Koshkonong.

In Jefferson County, STH 26 and its proposed alignments travel through the following towns: Town of Koshkonong; Town of Jefferson; Town of Aztalan; Town of Farmington; and, the Town of Watertown. The Jefferson County Agricultural Preservation and Land Use Plan designates agricultural preservation areas along STH 26 in all of these towns. In Dodge County, STH 26 and its proposed alignments travel near the Town of Shields and through the Town of Emmet and the Town of Clyman. The Town of Shields utilizes exclusive agricultural zoning.

**TABLE 3.1.4**  
**ROCK, JEFFERSON AND DODGE COUNTY AGRICULTURE PROFILES\***  
(1997 U.S. Census of Agriculture)

	Rock County			Jefferson County			Dodge County		
	1992	1997	% Change	1992	1997	% Change	1992	1997	% Change
Total Farmland, acres (ha)	343,115 (138,854)	351,013 (142,050)	+2 %	232,591 (94,126)	242,301 (98,056)	+4 %	414,240 (167,637)	391,959 (158,620)	-5 %
Average Farm Size, acres (ha)	245 (99)	265 (107)	+8 %	182 (74)	195 (79)	+7 %	207 (84)	217 (88)	+5 %
No. of Full Time Farms	834	693	-17 %	770	647	-16 %	1,468	1,189	-19 %
Market Value of Agricultural Products Sold (in thousands of dollars)	\$115,587	\$129,628	+12 %	\$106,270	\$131,266	+24 %	\$189,231	\$193,585	+2 %
Per Farm Average Market Value of Agricultural Products Sold	\$82,680	\$97,906	+18 %	\$83,023	\$105,860	+28 %	\$94,427	\$107,131	+13 %

\*Data provided is for entire County, not just portions in the study area.

### 3.1.5 Institutional Land Use

Institutional land uses are predominantly located in population centers and typically include schools, hospitals, police and fire stations, and airports.

#### 3.1.5.1 South Segment

Institutional land uses in the South Segment are concentrated in Janesville and Milton. In Janesville, school land use includes the Jefferson School located approximately one-half mile (0.8 km) east of STH 26 between Black Bridge Road and Zion Avenue, and the Marshall Middle School just south of Milwaukee Street along IH 90. Mercy Hospital is located approximately three miles (4.8 km) east of the center of downtown Janesville and the beginning of STH 26.

The City of Janesville Fire Department headquarters building is located on Milton Street, two blocks south of STH 26. Fire Station #5 is located on Newport Avenue, approximately 0.5 miles (0.8 km) west of STH 26. The municipal administrative center is located on North Jackson Street approximately three blocks west of STH 26 and includes the Police Station. Janesville is the County seat. The Rock County Airport is located south of the City along USH 51. The Rock County Complex (includes the county jail and Sheriff's Department) is located at the junction of STH 14 and USH 51.

Key institutional uses in the City of Milton include the Milton High School campus located at the intersection of High Street and Hilltop Drive approximately one-quarter mile (0.4 km) west of STH 26. The Milton Public Library and City Hall are located along High Street in the Milton College's former library space in the Shaw building approximately one mile (1.6 km) west of STH 26. The Police Station is



located along Parkview Drive, less than one-half mile west (0.8 km) of STH 26. The Fire Station and the Public Works department are located immediately north of Merchant Row on Madison Avenue, approximately 2.5 miles (4.0 km) west of STH 26.

The Milton Town Hall is located in the City of Milton on First Street approximately one mile (1.6 km) west of STH 26. The Harmony Town Hall is located in the City of Janesville on Rotamer Road approximately 1.5 miles (2.4 km) east of STH 26.

### **3.1.5.2 Central Segment**

Institutional land uses in the Central Segment are predominantly located in Fort Atkinson, Jefferson and Johnson Creek. Key school land uses in Fort Atkinson include the Fort Atkinson High School and Milwaukee Area Technical College located adjacent to STH 26 in the northwest part of the City immediately north of USH 12. Several other schools are located in and around the downtown area. The Fort Atkinson Memorial Hospital is located on the downtown's east side approximately 0.75 miles (1.2 km) east of the STH 26 bypass. The Police Department is located less than one-quarter mile (0.4 km) south of STH 26 and two blocks north of the Rock River. The Fire Department is located approximately one-quarter mile (0.4 km) north of STH 26, just south of the Rock River. The Fort Atkinson Municipal Airport is located northeast of the City of Fort Atkinson.

The Town of Koshkonong office is located in Fort Atkinson on Star School Road, approximately 4 miles (6.4 km) east of STH 26. The Sumner Town Hall is located in Busseyville on Church Street, far outside of the STH 26 study area.

In Jefferson, the Jefferson School District campus including the Jefferson High School and West Elementary School is located along West Milwaukee Street, approximately 0.75 miles (1.2 km) west of STH 26. Jefferson East Elementary School is located on South Sanborn Avenue, a few blocks south of USH 18 and approximately 900 feet (274 m) east of STH 26. Jefferson Middle School is located on South Copeland Street, approximately 450 feet (137 m) south of USH 18 and approximately 900 feet (274 m) west of STH 26, on the west side of Jefferson.

The St. Coletta School, a private campus, is located east of Jefferson along USH 18 and approximately one mile (1.6 km) east of STH 26. The Police Station is located on South Main Street/STH 26 in downtown Jefferson. The fire station is also in downtown Jefferson, on East Racine Street approximately three blocks from STH 26.

The County Fairgrounds is located approximately one-half mile (0.8 km) west of STH 26 on West Puerner Street. The "County Farm" property operated by Jefferson County is located immediately southwest of the City of Jefferson in Section 15 of the Town of Jefferson. This property currently includes the Jefferson County Countryside Home, and the Jefferson County Dairy. The following Jefferson County offices are located on the property: Jefferson County Community Services Office, Elderly Services, Jefferson Home Health, Jefferson County Human Services, Jefferson County Nurse, Jefferson County Personal Care, Jefferson County WIC Program, and the Jefferson County Economic Assistance Department. There is no hospital in the City of Jefferson. The hospital in the City of Fort Atkinson serves Jefferson.

The Town of Jefferson does not have a town hall. The Town Hall of Aztalan is located on CTH B, approximately 4.0 miles (6.4 km) west of STH 26. The Town Hall of Farmington is located on Farmington Road in Watertown, approximately 4.0 miles (6.4 km) east of STH 26.

The Johnson Creek school campus site is located at the southwest corner of STH 26 and CTH “B” in the Village of Johnson Creek. This campus includes the Johnson Creek Elementary School, the Johnson Creek Middle School and the Johnson Creek High School along with the Johnson Creek School District building. The Little Creek Preschool is located on Watertown Street. There are plans to locate another City school campus between CTH “B” and STH 26 on the southwestern edge of the Village.

The Police and Fire stations are located downtown, near STH 26. Hospitals in Watertown and Fort Atkinson serve the Johnson Creek area.

### **3.1.5.3 North Segment**

Most of the institutional land located in the North Segment is confined to the Watertown area. Several large tracts include the Watertown School District campus on the northwest side of the City of Watertown less than 0.25 miles (0.4 km) west of STH 26. This campus includes the Watertown High School. Maranatha Baptist Bible College is located on the west side approximately 0.5 miles (0.8 km) from STH 26. There are 13 other schools throughout the City located within approximately 1.0 mile (1.6 km) of STH 26 and two schools located approximately 5.0 miles (8.0 km) east of the City on STH 109.

The Police and Fire stations are both located on Jones Street in downtown Watertown approximately four blocks east of STH 26. The Watertown Memorial Hospital is located on the northeast side on STH 16 and approximately one mile (1.6 km) east of STH 26, and Bethesda Lutheran Home is on the southwest side of Watertown located less than one-half mile west of STH 26, just west of the Rock River. The Watertown Municipal Airport, which primarily serves businesses and industries, is located on the southern edge of the City approximately 0.1 miles (0.16 km) east of STH 26.

The Watertown Town Hall is located approximately 2.0 miles (3.2 km) south of the City of Watertown on STH 26. The Town of Shield Town Hall is located in St. Mark’s Fellowship Hall on Rich Road in the City of Watertown. It is located approximately one mile (1.6 km) east of STH 26.

The Town Hall of Emmet is located on the north side of the City of Watertown, on STH 16/STH 26. The Town Hall of Clyman is located on Main Street in the Village of Clyman, approximately one mile (1.6 km) east of STH 26.

### **3.1.6 Commercial/Industrial Land Use**

As with institutional development, commercial and industrial development is generally found in the population centers of the study area. Downtown commercial land use is concentrated in central business districts. Older industrial development is surrounding or mixed with central business districts. New industrial development and planned expansion of industrial facilities is generally found near city limits.

Highway-commercial land use is also located in the towns along arterials and at-grade intersections. Industrial land use is also found along arterials in the towns.

#### **3.1.6.1 South Segment**

The South Segment’s population centers of Janesville and Milton include well-developed urban areas with economies largely based upon manufacturing and industry along with commercial businesses.

Janesville’s central business district is compact and surrounded by established residential neighborhoods. Land uses in the central business district are mixed and include commercial, office, institutional and

residential. Commercial areas other than the central business district have developed in clusters throughout the City. The largest of these commercial developments is located on the northeast side of the City on Center Avenue, along Main Street near Memorial Drive, and along Milton Avenue. A number of tracts of land along STH 26 in the Town of Harmony, northeast of Janesville are designated as commercial land in the Town's land use plan.

Industrial areas are located in the southern portion of Janesville, south of the Rock River and in the area of the railroad interchange near Rockport Road. General Motors, the major employer with 5,500 employees, is located south of East Delavan Drive and west of East Jackson Drive.

The City of Milton was formed from the two Villages of Milton and Milton Junction; therefore, it has two small urban centers. These urban centers are referred to in the City of Milton Comprehensive Plan as Central Mixed Use districts: 1) Parkview Drive/Old College, on the southeast side; and, 2) Merchant Row, on the northwest side of the City. Milton has two small areas of industrial development, east of the City along STH 59, and west of the City along Vincent Street adjacent to the Wisconsin Southern Railroad tracks.

### **3.1.6.2 Central Segment**

The population centers of the City of Fort Atkinson, Jefferson, and the Village of Johnson Creek include central business cores with segments of highway-commercial development. Key industrial areas are primarily located in the central and southern sections of the municipalities.

The downtown business district of Fort Atkinson includes a variety of smaller retail stores and services. In addition, there are several highway corridor commercial areas, including the USH 12 east corridor, the Business 26 south corridor and the USH 12/89 corridor. These commercial areas include such services as fast-food restaurants, gas stations, convenience stores, big-box retailers, and a hotel.

Fort Atkinson includes three primary industrial areas. The Gordon F. Day industrial district is located at the junction of Blackhawk Drive and STH 89. The Janesville Avenue corridor industrial district is located west of the Janesville Avenue intersection with STH 26 and Business Route 26. The Trimmer Property industrial pocket is located north and south of East Cramer and east of the Union Pacific Railroad corridor.

Jefferson has a compact central business district surrounding the intersection of STH 26 and USH 18. The central business district is surrounded by older, traditional residential neighborhoods. Uses in the central business district are mixed and include commercial, office, institutional and residential. Commercial areas other than the central business district are found in clusters of development throughout the City. The largest of these commercial developments are located along STH 26 at Collins Road, along West Racine Street, and along STH 26 north of Puerner Street.

The City of Jefferson's industrial areas are located in the southern portion of the City south of the Rock River and in the new business and industrial park northwest of the City along East Puerner Street and North Parkway. The City has planned for expansion of both industrial areas to include a mix of commercial, light industrial, and general industrial uses. The Ladish Malt Company, a major local industry, is located approximately one mile (1.6 km) north of the City of Jefferson and 0.75 miles (1.2 km) east of STH 26 in the Town of Aztalan.

In the Village of Johnson Creek, commercial areas are primarily located at the intersection of CTH "B" and CTH "Y" and along STH 26. Industrial areas are located along the railroad tracks near Grell Lane in



the center of the Village. A growing area of industrial development is located east of STH 26 and north of CTH “B.”

### **3.1.6.3 North Segment**

According to the Watertown Comprehensive Master Plan, the Watertown central business district is a traditional downtown that covers approximately 40 city blocks. The historic character of this area makes it distinct in comparison to other commercial areas of the City. Uses in this area are mixed and include commercial, office, institutional and residential. The central business district is continuing to undergo transition from the retail center of the community to an area of specialty shopping, services, offices and residential development.

Commercial areas other than the central business district are found in clusters of development throughout the City. These developments occur along STH 19, STH 26, and STH 16, and along crossroads intersecting these highways. The largest commercial developments are on the south side of the City, located along STH 26 between Milwaukee Street and Airport Road. Industrial areas are located in the southern portion of Watertown along the Canadian Pacific Railway that passes diagonally through the City. These industrial uses are located along West Street, Hart Street, and St. Mary Street.

There are also commercial and industrial land use areas along arterials in the towns of the North Segment. These areas tend to be clustered along STH 26.

### **3.1.7 Residential Land Use**

Residential development is concentrated in the study area’s population centers. This development is primarily single family residential with scattered pockets of multifamily residential. Rural residential developments are located in various parts of the study area as well, in the towns and on the outskirts of smaller cities and villages.

#### **3.1.7.1 South Segment**

In the South Segment, a majority of residential land use is in Janesville and Milton. Residential land use in the City of Janesville includes primarily single family residential with scattered pockets of multifamily residential. STH 26 runs through a single-family residential neighborhood in the center of the City of Janesville and through land on the north side of the City that is designated for residential use.

Most housing within Milton is single-family detached housing and is spread throughout the community rather than being clustered around a central business core. Rural residential land use is located along STH 26 in the Town of Milton, north of the City of Milton and in the Towns of Sumner and Koshkonong.

#### **3.1.7.2 Central Segment**

In the Central Segment, a majority of the residential land use is in Fort Atkinson, Jefferson and Johnson Creek. Most of the residential land use in Fort Atkinson is single-family development. In the central part of the City, older residential neighborhoods surround the central business district; newer residential neighborhoods are located on the south and north sides of the City.

Single-family development is the primary residential land use in the City of Jefferson. Much of the single-family land use is concentrated in traditional neighborhoods around the central business district. A number of newer single-family neighborhoods are present in the southwestern and southeastern portions

of the City. Multifamily residential use is concentrated in the downtown area; a tract of multifamily is also located along the west side of STH 26 near the northern border of the City along with a tract of mobile home land use just north of downtown within the City of Jefferson, along the east side of STH 26.

The Village of Johnson Creek has a mixture of residential development adjacent to the small central business district and rapidly developing highway-oriented commercial development areas.

### **3.1.7.3 North Segment**

The predominant type of residential land use in the City of Watertown is single-family housing. In the north-central part of the City, single-family neighborhoods are located primarily between 4<sup>th</sup> Street and Church Street, north of the Rock River. In the south-central portion of the City, single-family neighborhoods are primarily south of the Canadian Pacific railroad tracks and north of the Airport. On the east side of the City there is a single-family neighborhood centered around the Luther Preparatory School, between the downtown area and the STH 16 bypass. On the west side, there are two single family neighborhoods, one between the two rail lines generally north of Main Street and the other off of Milford Street on the City's southwest side. Two-family residential use is generally concentrated around downtown; a few three-family developments are located on the northeast side of the City. Mixed residential use (multifamily) is primarily downtown, near Watertown High School and on the south side of the City.

Rural residences comprise another important component of North Segment residential land use. Most rural residences are located along the Rock River in the Town of Watertown and in the Town of Emmet, north of the City of Watertown.

### **3.1.8 Cemeteries**

There are a number of cemeteries in the study area. Four cemeteries are located adjacent to STH 26, and several are located within one mile of STH 26.

#### **3.1.8.1 South Segment**

Janesville cemeteries are outside the boundaries of the study corridor. Cemeteries in Milton include the Milton East Cemetery located adjacent to STH 26 about 0.2 miles (0.03 km) north of STH 59, Milton Junction Cemetery, St. Mary's cemetery, and an unnamed cemetery on John Paul Road. North of Milton, the Otter Creek Cemetery is located about 1,000 feet (300 m) west of STH 26 along CTH N.

#### **3.1.8.2 Central Segment**

Cemeteries in Fort Atkinson include St. Joseph's Cemetery and Lakeview Cemetery located next to each other along Janesville Avenue on the south side of the City, and Evergreen Cemetery located at the corner of STH 89 and West Cramer Street on the City's north side. The Rock River Cemetery is located just south of Jefferson along CTH K. Cemeteries in Jefferson include Greenwood Cemetery, located about one block east of the existing STH 26 corridor, St. John Cemetery, and the Union Cemetery. Three cemeteries are located east of Jefferson along USH 18. At the intersection of CTH Y are St. Lawrence Cemetery and a cemetery associated with St. Coletta School. At the intersection of Christberg Road is the Christberg Cemetery. Cemeteries in Johnson Creek include Evergreen Cemetery about two blocks west of existing STH 26 on Milwaukee Street, Johnson Creek Cemetery, and St. Mary's Cemetery.

### **3.1.8.3 North Segment**

A cemetery is associated with the Ebenezer Moravian Church on High Street south of Ebenezer Road. In Watertown, St. Henry's Cemetery is located adjacent to STH 26 in the northern part of the city. Other cemeteries in Watertown include St. Bernard's Catholic Cemetery on CTH A; Oak Hill Cemetery on East Main near the STH 16 bypass; Emanuel Cemetery on Juneau Street just south of CTH R; and Moravian Cemetery just north of CTH R. Emmet Cemetery is located adjacent to STH 26 north of Watertown between Second Street and CTH Q. Mengel Cemetery is located adjacent to STH 26 just north of the STH 60 (west) interchange, and Clyman Center Cemetery is located just west of STH 26 along STH 60 (west).

### **3.1.9 Transportation**

Roadways, public transportation, rail service, aviation, bike routes, and pedestrian routes serve the STH 26 study area's transportation system. Roadways provide the primary source of transportation, both regionally and locally. Public transportation, bike routes, and pedestrian routes provide a secondary source of transportation, but these services are generally located only within urban areas. General aviation in the project area does not provide scheduled passenger air service. Roadways are used to reach major national commercial airports in the region such as Madison and Milwaukee. Three rail lines in the project area provide freight rail service. Amtrak provides passenger rail service connecting Chicago to Portland/Seattle via St. Paul-Minneapolis with stations in Milwaukee and Columbus. Amtrak also provides passenger rail service between Janesville and Chicago with a station in Janesville.

The following addresses in detail each of the transportation services in the project area.

#### **3.1.9.1 Highways**

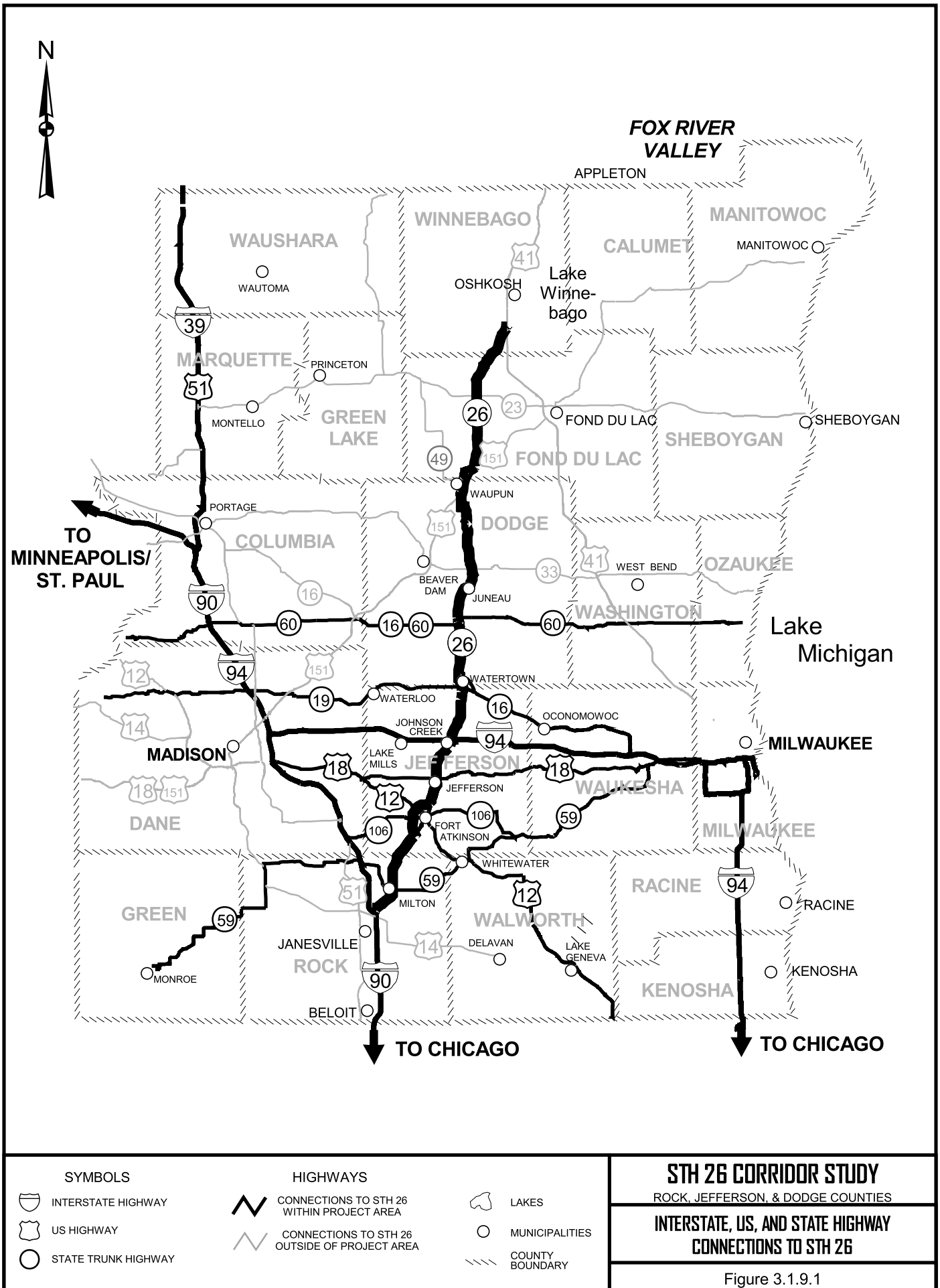
STH 26 is designated as a Principal Arterial that serves corridor movements having trip length and travel density characteristics of an interstate or interregional nature. Two basic criteria for functionally classifying STH 26 as a Principal Arterial are: a) population service, connecting places of 50,000 with places of 50,000, and connecting places of 5,000 with places of 50,000, and b) traffic volume greater than 3,000. According to the 2000 U.S. Census, the populations of the municipalities located in the corridor are: Janesville – 59,498, Milton – 5,132, Fort Atkinson – 11,621, Johnson Creek – 1,581, and Watertown – 21,598. As a Principal Arterial, STH 26 serves as an important national, state, regional, and local route. [Figure 3.1.9.1](#) shows the Interstate, US, and State Trunk Highway connections to STH 26.

#### ***National and Statewide***

STH 26 serves as a major north-south route in south central Wisconsin, intersecting IH 90 at Janesville, IH 94 midway between Madison and Milwaukee at Johnson Creek, and US Highway (USH) 151 near Waupun. Due to its importance, the entire route is included in the National Highway System (NHS). For Milton, Fort Atkinson, Jefferson, and Watertown, STH 26 is the most direct link to IH 90 and IH 94 and therefore to the entire interstate highway system.

STH 26 serves through traffic and commodities transport, linking the communities along it, points to the south of Janesville at IH 90 including Chicago, and the industrial and manufacturing centers in the Green Bay-Oshkosh and Fox River Valley area to the north. Because it is the most direct route between USH 151, USH 41, the Fox River Valley and IH 90 at Janesville, STH 26 is a preferred travel route from the Fox River Valley to points south of Janesville.





STH 26 from IH 90 at Janesville to USH 151 at Waupun and beyond to USH 41 is designated as a state long-truck route, which allows tractor-semitrailer combinations up to 65 feet (22 m) in length to use the corridor. STH 26 is also a federal truck route from IH 94 in Johnson Creek to STH 16 in Watertown.

In recognition of its statewide importance, STH 26 is designated as a Connector highway from IH 90 to USH 41 in the Wisconsin Department of Transportation's (WisDOT) *Corridors 2020* plan. The primary purpose of the connector system is to link other significant economic and tourism centers to the backbone system, thus more closely integrating them into the statewide and national transportation systems. STH 26 was identified as a connector highway for its service to trade centers, manufacturing centers, recreation and tourism centers, and agricultural centers, and for its high truck volumes.

### ***Regional***

In addition to STH 26 being an important statewide route, it also serves as a significant regional route in southeastern Wisconsin. STH 26 links six cities or villages within the project limits, including Janesville, Milton, Fort Atkinson, Jefferson, Johnson Creek, and Watertown. These include some of the largest communities within Rock, Jefferson, and Dodge Counties. STH 26 is highly accessible within the study area with connections to the following major routes:

- IH 90 at Janesville - IH 90 connects STH 26 at Janesville with Madison, Wisconsin Dells, La Crosse, Beloit, and the Rockford, Illinois area and beyond.
- STH 59 at Milton - STH 59 connects STH 26 at Milton with points to the west and Whitewater to the east.
- STH 106 at Fort Atkinson - STH 106 connects STH 26 with points west and east of Fort Atkinson.
- USH 12 at Fort Atkinson - USH 12 connects STH 26 with Madison and Whitewater.
- USH 18 at Jefferson - USH 18 connects STH 26 with Madison and Milwaukee.
- IH 94 at Johnson Creek - IH 94 connects STH 26 to Madison, Minneapolis/St. Paul, Milwaukee, and Chicago.
- STH 19 at Watertown - STH 19 connects STH 26 to points west of Watertown.
- STH 16 at Watertown - STH 16 connects STH 26 with points west and Oconomowoc and Milwaukee to the east.
- STH 60 north of Watertown - STH 60 connects STH 26 with Columbus to the west and Hartford to the east.

STH 26 provides regional access to schools, health care, and shopping facilities. Numerous commercial establishments are located within the communities along the corridor route. Hospitals are located in Janesville, Fort Atkinson, and Watertown. Major employment centers are located in communities within the project limits including 18 employers having greater than 400 employees. General Motors in Janesville is the largest employer in the area with 5,500 employees.

STH 26's connection with IH 94 provides the region with access to Wisconsin's two largest population centers with metropolitan services including cultural activities, sporting events, health care, and alternative modes of transportation (bus, train, airplane) available in Madison and Milwaukee.

This route is a north-south commuter route in the region. Commuter characteristics are similar throughout the study area, but commuter destinations vary greatly. In general, those living in the study area work in the urban and economic centers of Janesville, Fort Atkinson, Jefferson, and Watertown. In the three counties, approximately 6,000 to 9,000 workers commute into each county, predominantly from nearby counties in Wisconsin, while approximately 10,000 to 13,000 workers commute from each County to

work outside of that County. For those workers traveling outside of the study area, Waukesha County, the City of Madison and greater region, and the City of Beloit are also major destinations.

### ***Local***

In addition to serving as a major regional transportation link, STH 26 serves as a local transportation corridor for the communities it passes through. This route provides mobility for residents within the communities, and links area businesses, industries, and agriculture to the broader state and interstate transportation system. STH 26 serves regional traffic needs and relieves the local road systems from carrying this traffic. It is the major local arterial highway providing direct access to the downtown areas of Janesville, Milton, Jefferson, Johnson Creek and Watertown. STH 26 is also used for shorter, local trips within and between communities.

#### **3.1.9.2 Public Transportation**

Public transportation in the study area is limited. Janesville operates six fixed transit routes within the city with the assistance of State and Federal funds. There is no general public transportation in the City of Milton, however the Council on Aging and Edgerton Hospital operate a shared ride taxi service for Milton, Edgerton and rural areas in northern Rock County. The City of Fort Atkinson has a privately owned cab service. Neither the City of Jefferson nor the Village of Johnson Creek has public transportation systems. Watertown supports a taxi service with a fleet of seven vehicles with the assistance of State and Federal funds.

Inter city bus service on STH 26 is currently limited to charters. Badger Coaches, Inc. (also known as Badger Bus) provides eight daily buses between Madison and Milwaukee on IH 94. Van Galder Bus Company operates 19 daily buses in each direction on IH 90 between Madison and O'Hare Airport in Chicago, each with a scheduled stop in Janesville. Van Galder Bus Company also operates four daily bus trips between Madison and downtown Chicago, each with a scheduled stop in Janesville. Greyhound provides five daily bus runs on IH 90 between Madison and Rockford, Illinois, with three of them stopping in Janesville. Greyhound also operates five daily buses on IH 94 between Madison and Milwaukee, with two of them being non-stop service.

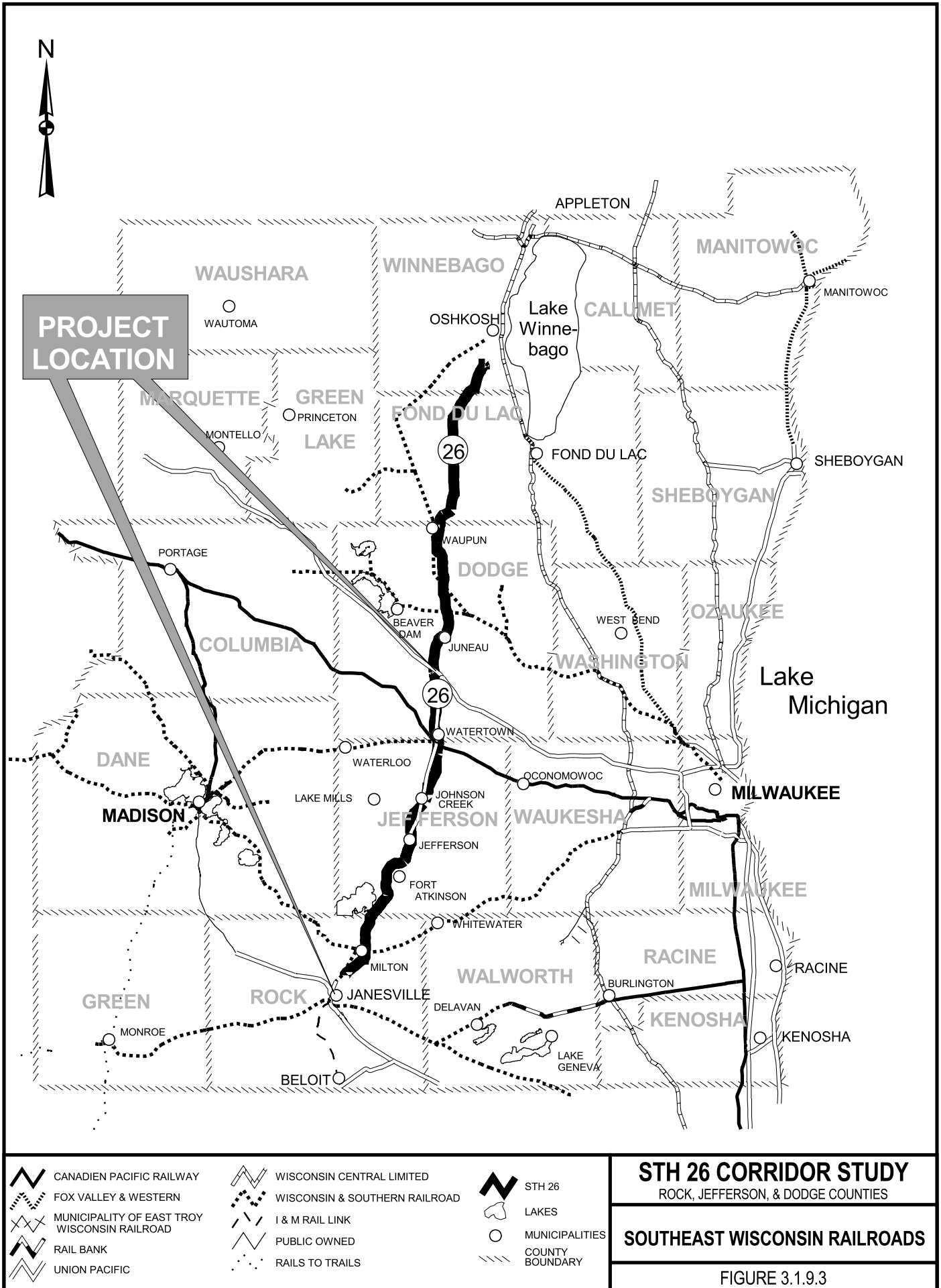
#### **3.1.9.3 Rail Service**

Figure 3.1.9.3 shows the railroad lines located in south-central and southeastern Wisconsin. Amtrak passenger service between Janesville and Chicago began in April 2000 traveling along the Wisconsin and Southern Railroad tracks. A passenger station is located in Janesville. Amtrak also provides passenger service connecting Chicago to Portland/Seattle via St. Paul-Minneapolis. Stations are located outside the project area in Milwaukee (approximately 64 miles [103 km] east of STH 26 on IH 94) and Columbus (approximately 18 miles [29 km] northwest of Watertown).

Wisconsin, along with a consortium of other Midwest states and the federal government is planning a network of high-speed passenger rail lines extending from a Chicago hub. Potential station sites include Milwaukee, Watertown, and Madison. If implemented, the earliest service could be provided would be 2005.

Three freight rail lines are located within the study area. The Union Pacific Railroad runs northwest and southeast from Janesville. The Wisconsin and Southern Railroad Company freight lines run east-west and north out of Janesville and enter the City of Milton from the south, east, and west. This freight line





runs through both of Milton's industrial areas and the downtown Merchant Row area. The northern industrial park area of Ft. Atkinson, Jefferson, Johnson Creek, and Watertown are served by the Union Pacific Railroad freight service on a line running north-south through these communities. The City of Watertown is also served by the Canadian Pacific Railway and the Wisconsin and Southern Railroad Company with service west to Madison, northwest to Columbus and La Crosse, and east into Milwaukee. The Union Pacific Railroad continues north of Watertown to Clyman Junction with connections to Minneapolis, Minnesota and Milwaukee. Amtrak passenger service passes through Watertown on the Canadian Pacific Railway without stopping.

#### **3.1.9.4 General Aviation**

National commercial air carrier and passenger aviation facilities for the study area are located approximately 40 minutes to the west of the study area in Madison at Dane County Regional Airport, and approximately one hour to the east in Milwaukee at General Mitchell International Airport. Several smaller county and municipal airports also serve the study area. The Rock County Airport is located south of the City of Janesville along USH 51, the Fort Atkinson Municipal Airport is located northeast of the City of Fort Atkinson, and the Watertown Municipal Airport is located on the southern edge of the City and serves businesses and industries. The Fort Atkinson and Watertown airports are served directly by STH 26.

#### **3.1.9.5 Trails and Bicycle Routes**

A number of trails serve the study area. Starting in the South Segment of the study area, the Ice Age National Scenic Trail winds through downtown Janesville. An extension of the trail northerly to Milton is in the planning stages along an abandoned railroad corridor located west of STH 26. The City of Janesville is planning construction of an overpass where the trail crosses existing STH 26 just north of IH 90. In Milton, the trail is being planned to follow Madison Avenue (STH 59 West) from the Merchant Row area to the Milton House on STH 26. From there, the trail would follow Storrs Lake Road easterly to the Storrs Lake Wildlife Area, and then easterly to Waukesha County.

The City of Milton plans to create a loop bicycle route system around the City, a central north-south bike route, and bike route connections to Rock County's regional bike path and the lakes around Milton. This would include a combination of on-road and off-road routes.

The Jefferson County Glacial River Trail is a north-south multi-use trail that runs adjacent to STH 26 beginning near the Rock/Jefferson County Line in the Town of Koshkonong and extending to Fort Atkinson. Figures 3.3.9-1 and 3.3.9-2 depict the existing trail. The Jefferson County Bikeway/Pedestrian Plan recommends extending this trail through Fort Atkinson to CTH K, which parallels the Rock River to the City of Jefferson. The trail would continue north out of Jefferson along the Rock River, crossing the Glacial Drumlin Trail and continuing on to Watertown. From there, the trail would continue to follow the Rock River easterly into Ixonia and Waukesha County.

The Glacial Drumlin Trail is a 47-mile (75-km) multi-use trail on an abandoned railroad grade that runs east-west through Jefferson County. The trail is located between the Village of Cottage Grove in Dane County and the City of Waukesha in Waukesha County. A four-mile (6.4 km) gap in the trail is present north of the City of Jefferson. The trail ends at STH 26 and resumes about 4 miles (6.4 km) easterly at Switzke Road. There are no designated routes around this closed section although trail users can travel along local public roads to make the connection.

The Watertown area is served by a state bicycle route that enters the city on CTH T from the west and exits via CTH E to the southeast. Signed bike routes are throughout the City on shared-use streets. While not marked, there is bicycle usage along High Street south out of Watertown. High Street parallels STH 26 until it ends at Ebenezer Road where bicyclists can use Ebenezer Road to CTH Y and points south.

The Wild Goose State Trail is a multi-use recreation trail that begins at the southern trailhead at STH 60 in the Town of Clyman and travels on an abandoned railroad grade for 34 miles (55 km) north through Juneau and Fond du Lac. The Dodge County Comprehensive Plan indicates that there are plans to extend the Wild Goose Trail south to eventually join with the Glacial Drumlin Trail in Jefferson County.

WisDOT is working with local communities along the STH 26 route to identify potential bike routes in the corridor that will facilitate inter-city travel by bicycle. The route which will be proposed eventually will use existing roads and trails, and may include some new bike path links that would be constructed as part of the STH 26 project in order to make a continuous bike route.

### **3.1.9.6 Pedestrian Routes**

Pedestrian routes in the study area are primarily located in the major population centers. There are gaps in these pedestrian route systems. Major population centers propose pedestrian route improvements to enhance community access and safety.

## **3.2 SOCIOECONOMIC CHARACTERISTICS**

### **3.2.1 Population Levels and Trends**

Historic and future population growth trends from the Wisconsin Department of Administration (WisDOA) are summarized in [Table 3.2.1-1](#) and [Table 3.2.1-2](#), and illustrated in [Figure 3.2.1-1](#) and [Figure 3.2.1-2](#).

Two of the three counties that the STH 26 project directly impacts exceeded the state growth rate of 7 percent from 1990 to 1998. Jefferson County grew by 8.8 percent and Rock County grew by 9.85 percent.

As shown on [Table 3.2.1-1](#), growth within the rural areas (towns) and urban areas (cities and villages) that make up the project study area have experienced approximately 12 percent population growth between the years of 1980 to 1998. Urban areas have grown nearly 17 percent growth, while Towns that comprise the rural portion of the study area have grown approximately 3 percent.

As shown on [Table 3.2.1-2](#), WisDOA predicts that for the period of 2000 to 2015 the population of the study area will grow 4.2 percent. Cities and villages are predicted to grow 7.3 percent during this time, whereas towns are predicted to grow 3.2 percent.

While Rock County utilizes WisDOA population projections, Jefferson County and Dodge County calculate their own population projections, which are listed in [Table 3.2.1-3](#). These projections are based on more recent data than that used by WisDOA in its projections. Between 1997 and 2020, the portions of Jefferson County and Dodge County in the STH 26 study area are predicted to grow 19.5 percent. Cities and villages are predicted to grow 23.5 percent, whereas towns are predicted to grow 13.6 percent.



**TABLE 3.2.1 – 1**  
**HISTORICAL POPULATION GROWTH (WisDOA)**

Civil Division <sup>1</sup>	1980	1990	1998	Amount of Growth/Decline
<b>Portions of Rock County in Study Area</b>				
Rural Areas <sup>2</sup>	16,007	15,879	16,287	280(1.75%)
Urban Areas <sup>3</sup>	59,498	60,908	68,891	9,393(15.79%)
<b>TOTAL</b>	<b>75,505</b>	<b>76,787</b>	<b>85,178</b>	<b>9,673(12.8%)</b>
<b>Portions of Jefferson County in Study Area</b>				
Rural Areas <sup>4</sup>	26,889	26,455	28,252	1,363(5.1%)
Urban Areas <sup>5</sup>	42,693	45,518	50,367	7,674(18.0%)
<b>TOTAL</b>	<b>69,582</b>	<b>71,973</b>	<b>78,889</b>	<b>9,307(13.4%)</b>
<b>Portions of Dodge County in Study Area</b>				
Rural Areas <sup>6</sup>	6,473	6,229	6,385	-88
Urban Areas <sup>7</sup>	2,166	2,334	2,494	328(15.14%)
<b>TOTAL</b>	<b>8,639</b>	<b>8,563</b>	<b>8,879</b>	<b>240(2.78%)</b>
Rural Total / % Change	49,369	48,563	50,924	1,555(3.15%)
Urban Total / % Change	104,357	108,760	121,752	17,395(16.67%)
<b>Study Area Totals</b>	<b>153,726</b>	<b>157,323</b>	<b>172,676</b>	<b>18,950(12.33%)</b>

**TABLE 3.2.1 – 2**  
**PROJECTED POPULATION GROWTH (WisDOA)**

Civil Division	2000	2005	2010	2015	WisDOA Predicted Growth/Decline 2000 - 2015
<b>Portions of Rock County in Study Area</b>					
Rural Areas <sup>1</sup>	16,488	16,695	16,846	16,961	473 (2.9%)
Urban Area <sup>2</sup>	66,002	68,025	69,128	70,516	4,514 (6.8%)
<b>TOTAL</b>	<b>82,490</b>	<b>84,720</b>	<b>85,974</b>	<b>87,477</b>	<b>4,987 (6.0%)</b>
<b>Portions of Jefferson County in Study Area</b>					
Rural Areas <sup>3</sup>	28,209	28,798	29,272	29,570	1,318 (4.7%)
Urban Areas <sup>4</sup>	50,201	51,832	53,134	54,270	3,903 (7.8%)
<b>TOTAL</b>	<b>78,410</b>	<b>80,630</b>	<b>82,406</b>	<b>83,840</b>	<b>5,221 (6.6%)</b>
<b>Portions of Dodge County in Study Area</b>					
Rural Areas <sup>5</sup>	6,300	6,239	6,198	6,118	-182 (-2.9%)
Urban Areas <sup>6</sup>	2,461	2,480	2,498	2,508	47 (1.9%)
<b>TOTAL</b>	<b>8,761</b>	<b>8,719</b>	<b>8,696</b>	<b>8,626</b>	<b>-135 (-1.5%)</b>
Rural Total / % Change	50,997	51,732	52,316	52,649	1,652 (3.2%)
Urban Total / % Change	118,664	122,337	124,760	127,294	8,630 (7.3%)
<b>Overall Study Area Totals &amp; Percent Population Change</b>	<b>169,661</b>	<b>173,819</b>	<b>177,076</b>	<b>179,943</b>	<b>7,267 (4.2%)</b>

<sup>1</sup>Includes Towns of Fulton, Harmony, Janesville, La Prairie, Lima, Milton, Rock.

<sup>2</sup>Includes Cities of Edgerton, Janesville, and Milton.

<sup>3</sup>Includes Towns of Aztalan, Cold Spring, Concord, Farmington, Hebron, Ixonia, Jefferson, Koshkonong, Lake Mills, Milford, Oakland, Palmyra, Sullivan, Sumner, Waterloo, Watertown.

<sup>4</sup>Includes Villages of Johnson Creek, Palmyra, Sullivan; and Cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo and Watertown.

<sup>5</sup>Includes the Towns of Clyman, Hustisford, Lebanon, Lowell, and Shields.

<sup>6</sup>Includes the Villages of Clyman, Hustisford, Lowell and Reeseville.

### Legend

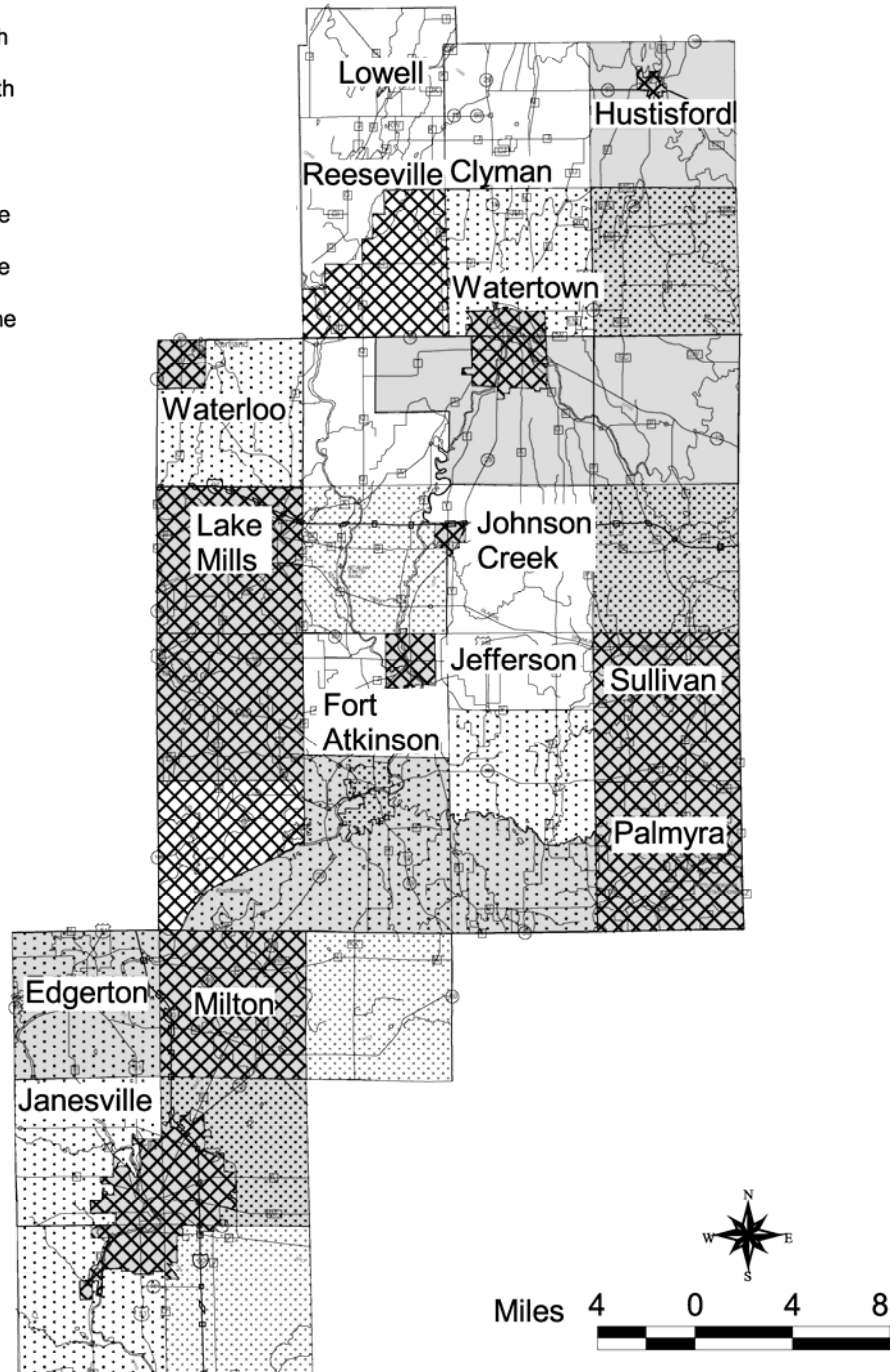
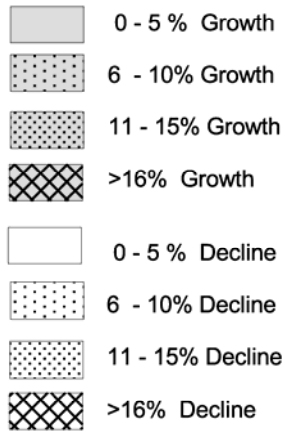


Figure 3.2.1 – 1 Historic Population Growth

### Legend

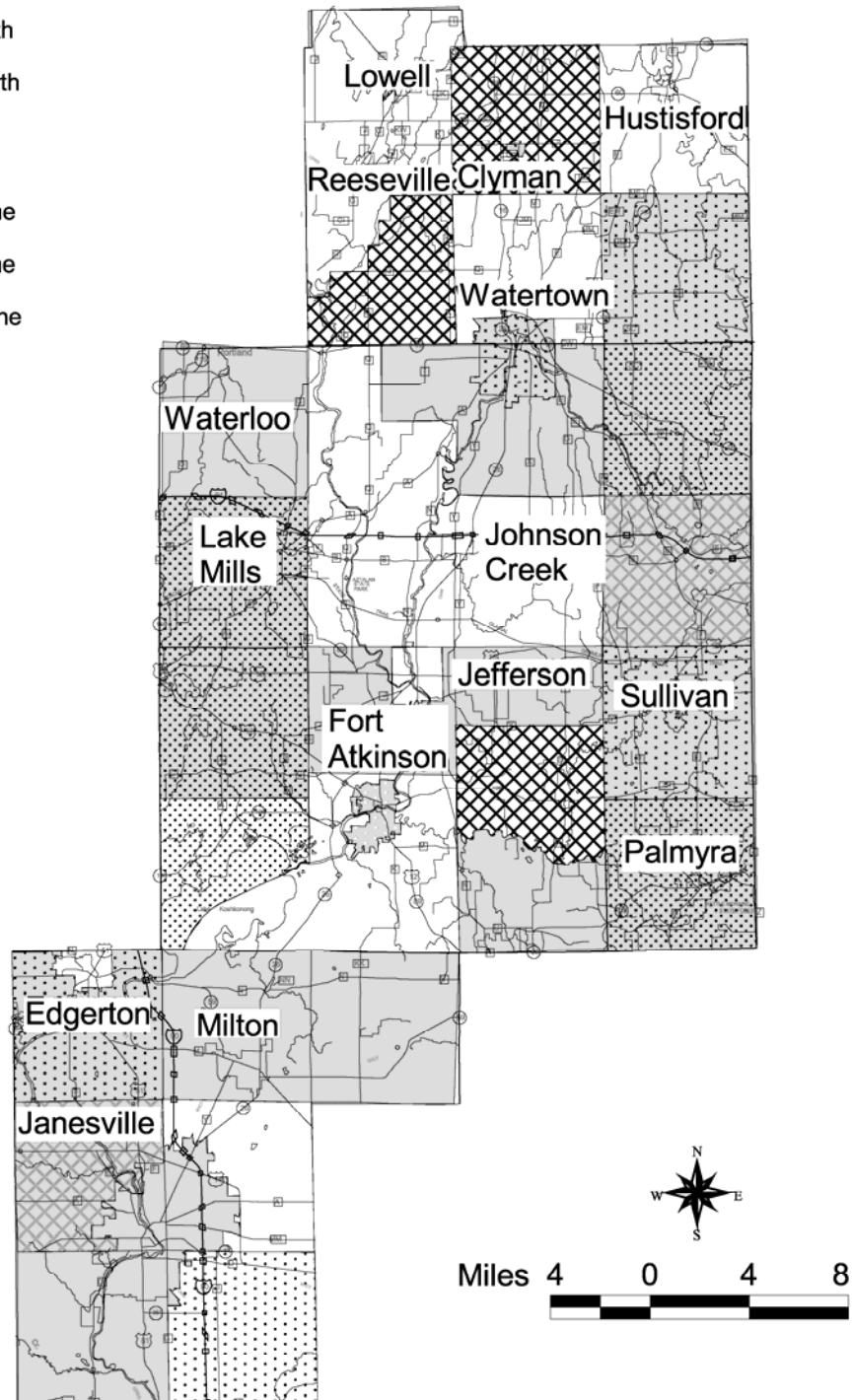
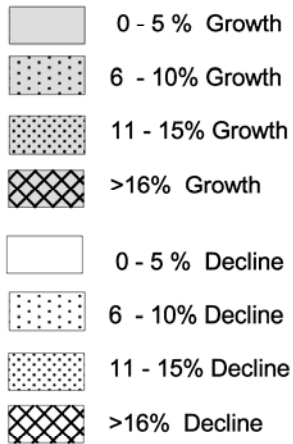


Figure 3.2.1 – 2 Predicted Population Growth

**TABLE 3.2.1 – 3**  
**PROJECTED POPULATION GROWTH:**  
**WisDOA Predictions Compared to County Government Predictions**

Counties	WisDOA Predicted Growth/Decline 2000 – 2015	County Population Predicted Growth/Decline 1997 – 2020
<b>Portions of Rock County in the Study Area</b>		
Rural Areas <sup>1</sup>	473 (2.9%)	Uses WisDOA Projections
Urban Areas <sup>2</sup>	4,514 (6.8%)	
<b>TOTAL</b>	4,987 (6.0%)	
<b>Portions of Jefferson County in the Study Area</b>		
Rural Areas <sup>3</sup>	1,318 (4.7%)	4,033 (14.4%)
Urban Areas <sup>4</sup>	3,903 (7.8%)	11,650 (23.4%)
<b>TOTAL</b>	5,430 (6.9%)	15,683 (20.2%)
<b>Portions of Dodge County in the Study Area</b>		
Rural Areas <sup>5</sup>	-182 (-2.9%)	490 (9.0%)
Urban Areas <sup>6</sup>	47 (1.9%)	510 (20.5%)
<b>TOTAL</b>	-135 (-1.5%)	1,000 (12.8%)

<sup>1</sup>Includes Towns of Fulton, Harmony, Janesville, La Prairie, Lima, Milton, Rock.

<sup>2</sup>Includes Cities of Edgerton, Janesville, and Milton.

<sup>3</sup>Includes Towns of Aztalan, Cold Spring, Concord, Farmington, Hebron, Ixonia, Jefferson, Koshkonong, Lake Mills, Milford, Oakland, Palmyra, Sullivan, Sumner, Waterloo, Watertown.

<sup>4</sup>Includes Villages of Johnson Creek, Palmyra, Sullivan; and Cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo and Watertown.

<sup>5</sup>Includes the Towns of Clyman, Hustisford, Lebanon, Lowell, and Shields.

<sup>6</sup>Includes the Villages of Clyman, Hustisford, Lowell and Reeseville.

### 3.2.2 Population Characteristics-Age and Racial Mix

Population characteristics for the study area are presented in [Table 3.2.2-1](#) by rural (towns) and urban (cities and villages). The population characteristics of the study area are very homogeneous with respect to age. The median age of residents is 33.9 years. Persons aged 18 and below make up approximately 27 percent of the population; persons aged 18 to 64 account for approximately 60 percent; and persons over 65 make up approximately 13 percent of the population.

[Table 3.2.2-2](#) includes the racial mix of the study area by rural (towns) and urban (cities and villages) area. [Figure 3.2.2](#) illustrates the racial distribution. Non-Hispanic White residents comprise an average of 94 percent or more of the population. The balance of the population is made up of several other groups, the most prominent of these being Hispanic, Black, Asian American, and American Indian populations. A larger percentage of each racial group lives in urban areas than in rural areas. The Town of Palmyra and the Village of Clyman include the highest percentage of Hispanic residents, and the Town of Janesville includes the highest percentage of Black residents. The Village of Johnson Creek includes the largest percentage of American Indian residents, and the City of Janesville's population has the largest percentage of Asian/Pacific Islander residents.



**TABLE 3.2.2-1**  
**POPULATION CHARACTERISTICS (1990 U.S. Census)**

Civil Division	1990 Population	Persons Under 18	Persons 18 through 64	Persons 65 and Over	Median Age
<b>Portions of Rock County in Study Area</b>					
Rural Areas <sup>1</sup>	15,879	4,083 (25.7%)	10,061 (63.4%)	1,822 (11.5%)	35.7
Urban Areas <sup>2</sup>	60,908	16,262 (26.7%)	37,007 (60.8%)	7,552 (12.4%)	32.7
<b>TOTAL</b>	<b>76,787</b>	<b>20,345 (26.5%)</b>	<b>47,068 (61.3%)</b>	<b>9,374 (12.2%)</b>	<b>35.8</b>
<b>Portions of Jefferson County in Study Area</b>					
Rural Areas <sup>3</sup>	26,459	7,120 (26.9%)	16,208 (61.3%)	3,131 (11.8%)	35.2
Urban Areas <sup>4</sup>	38,778	10,210 (26.3%)	22,936 (59.1%)	5,632 (14.5%)	32.2
<b>TOTAL</b>	<b>65,237</b>	<b>17,330 (26.6%)</b>	<b>39,144 (60.0%)</b>	<b>8,763 (13.4%)</b>	<b>34.6</b>
<b>Portions of Dodge County in Study Area</b>					
Rural Areas <sup>5</sup>	6,229	1,827 (29.3%)	3,731 (59.9%)	683 (11.0%)	32.8
Urban Areas <sup>6</sup>	2,334	661 (28.3%)	1,322 (56.6%)	339 (14.5%)	32.8
<b>TOTAL</b>	<b>8,563</b>	<b>2,488 (29.1%)</b>	<b>5,053 (59.0%)</b>	<b>1,022 (11.9%)</b>	<b>32.8</b>
<b>Rural Total</b>	<b>48,567</b>	<b>13,030 (26.8%)</b>	<b>30,000 (61.8%)</b>	<b>5,636 (11.6%)</b>	<b>34.6</b>
<b>Urban Total</b>	<b>102,020</b>	<b>27,133 (26.6%)</b>	<b>61,265 (60.1%)</b>	<b>13,523 (13.3%)</b>	<b>32.7</b>
<b>Study Area Totals</b>	<b>157,323</b>	<b>42,037 (26.7%)</b>	<b>95,045 (60.4%)</b>	<b>20,452 (13.0%)</b>	<b>Study area median age: 32.8 years</b>

**TABLE 3.2.2-2**  
**RACIAL MIX (1990 U.S. Census)**

Civil Division	All Persons 1990 Census	Non-Hispanic White	Black	Hispanic (all Races)	American Indian	Asian/ Pacific Islander	Other
<b>Portions of Rock County in Study Area</b>							
Rural Areas <sup>1</sup>	15,966 (100.0%)	15,564 (97.5%)	175 (1.1%)	140 (0.9%)	56 (0.4%)	30 (0.2%)	1 (0.0%)
Urban Areas <sup>2</sup>	60,821 (100.0%)	59,270 (97.5%)	291 (0.5%)	670 (1.1%)	144 (0.2%)	428 (0.7%)	18 (0.0%)
<b>TOTAL</b>	<b>76,787 (100.0%)</b>	<b>74,834 (97.5%)</b>	<b>466 (0.6%)</b>	<b>810 (1.1%)</b>	<b>200 (0.3%)</b>	<b>458 (0.6%)</b>	<b>19 (0.0%)</b>
<b>Portions of Jefferson County in Study Area</b>							
Rural Areas <sup>3</sup>	26,459 (100.0%)	26,004 (98.3%)	36 (0.1%)	300 (1.1%)	52 (0.2%)	59 (0.2%)	8 (0.0%)
Urban Areas <sup>4</sup>	38,778 (100.0%)	37,692 (97.2%)	43 (0.1%)	758 (2.0%)	114 (0.3%)	161 (0.4%)	10 (0.0%)
<b>TOTAL</b>	<b>65,237 (100.0%)</b>	<b>63,696 (97.6%)</b>	<b>79 (0.1%)</b>	<b>1,058 (1.6%)</b>	<b>166 (0.3%)</b>	<b>220 (0.3%)</b>	<b>18 (0.0%)</b>
<b>Portions of Dodge County in Study Area</b>							
Rural Areas <sup>5</sup>	6,241 (100.0%)	6,200 (99.3%)	0 (0.0%)	24 (0.4%)	7 (0.1%)	10 (0.2%)	0 (0.0%)
Urban Areas <sup>6</sup>	2,322 (100.0%)	2,270 (97.8%)	1 (0.0%)	42 (1.8%)	7 (0.3%)	2 (0.1%)	0 (0.0%)
<b>TOTAL</b>	<b>8,563 (100.0%)</b>	<b>8,470 (98.9%)</b>	<b>1 (0.0%)</b>	<b>66 (0.8%)</b>	<b>14 (0.2%)</b>	<b>12 (0.1%)</b>	<b>0 (0.0%)</b>
<b>Rural Areas / %</b>	<b>48,666 (31.3%)</b>	<b>47,768 (31.7%)</b>	<b>211 (0.1%)</b>	<b>464 (0.3%)</b>	<b>126 (0.1%)</b>	<b>99 (0.1%)</b>	<b>9 (0.0%)</b>
<b>Urban Areas / %</b>	<b>101,921 (67.7%)</b>	<b>99,232 (65.9%)</b>	<b>335 (0.2%)</b>	<b>1,470 (1.0%)</b>	<b>254 (0.2%)</b>	<b>591 (0.4%)</b>	<b>28 (0.0%)</b>
<b>Study Area Total / %</b>	<b>150,587 (100.0%)</b>	<b>147,000 (97.6%)</b>	<b>546 (0.4%)</b>	<b>1,934 (1.3%)</b>	<b>380 (0.3%)</b>	<b>690 (0.5%)</b>	<b>37 (0.0%)</b>

<sup>1</sup>Includes Towns of Fulton, Harmony, Janesville, La Prairie, Lima, Milton, Rock.

<sup>2</sup>Includes Cities of Edgerton, Janesville, and Milton.




<sup>3</sup>Includes Towns of Aztalan, Cold Spring, Concord, Farmington, Hebron, Ixonia, Jefferson, Koshkonong, Lake Mills, Milford, Oakland, Palmyra, Sullivan, Sumner, Waterloo, Watertown.

<sup>4</sup>Includes Villages of Johnson Creek, Palmyra, Sullivan; and Cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo and Watertown.

<sup>5</sup>Includes the Towns of Clyman, Hustisford, Lebanon, Lowell, and Shields.

<sup>6</sup>Includes the Villages of Clyman, Hustisford, Lowell and Reeseville.

## Legend

	98-100% Non-Hispanic White 0-2% Black; Hispanic; American Indian; Asian/Pacific Islander; other
	96-98% Non-Hispanic White 2-4% Hispanic 0-2% Black; American Indian; Asian/Pacific Islander; other
	94-96% Non-Hispanic White 3-5% Black 0-3% Hispanic; American Indian; Asian/Pacific Islander; other

(See Table 3.2.2 - 2 Racial Mix)

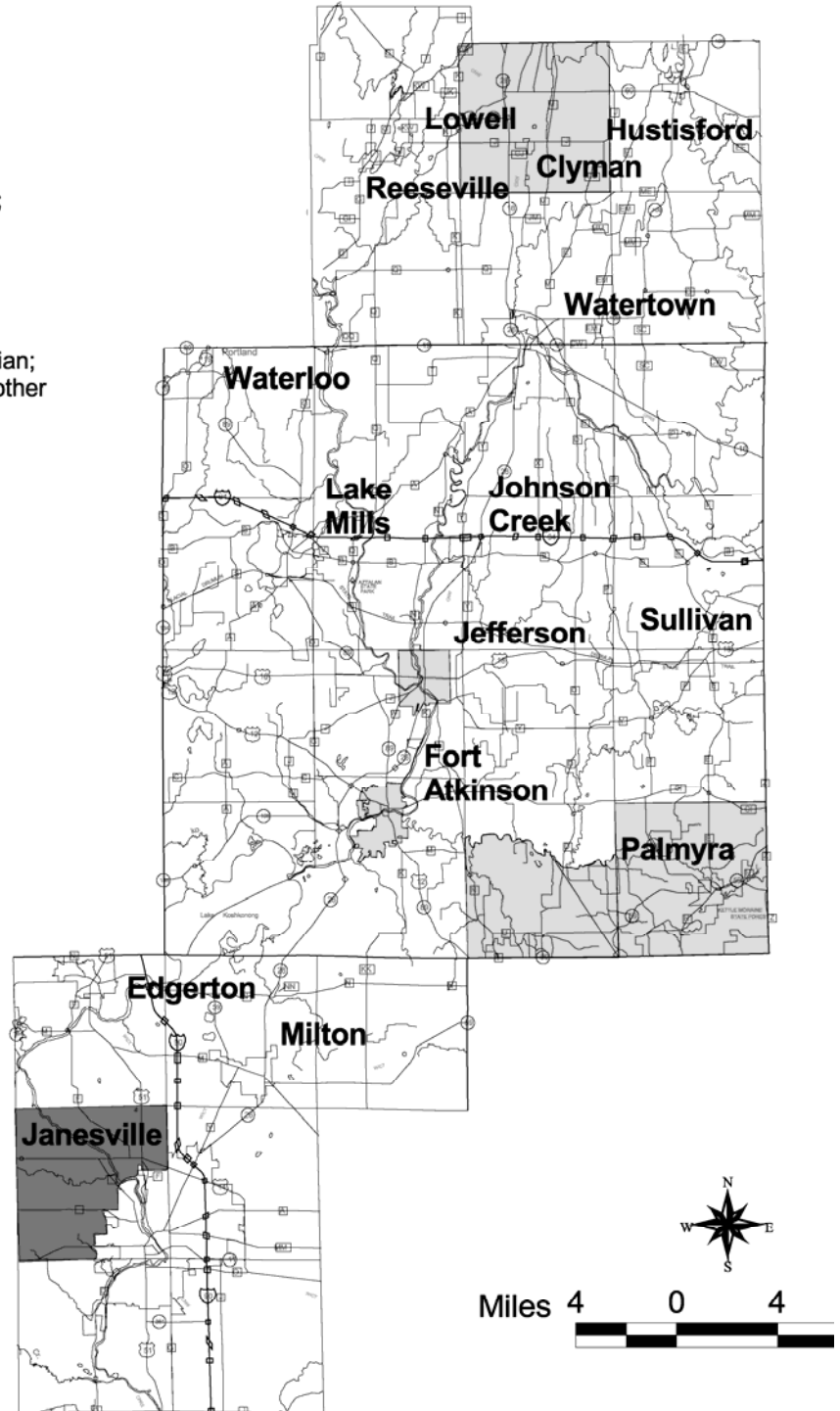


Figure 3.2.2 Racial Mix

### 3.2.3 Economic Setting

#### 3.2.3.1 Overall Economy

The study area relies heavily on the manufacturing sector of the economy for jobs and wages. In 1992, the number of manufacturing jobs was approximately eight times the number of jobs in the combined wholesale, retail and service sectors; the manufacturing sector also generated substantially more sales dollars than the other three sectors combined.

From 1992 to 1997, personal and per capita income rose substantially across the study area. During 1998 and 1999, residential property values were the largest contributor to the tax base followed by commercial and manufacturing property values. The total value of all property within the study area rose slightly from 1998 to 1999.

#### 3.2.3.2 Personal Income

From 1992 to 1997, total personal income for the three counties of the study area increased by an average of over 28 percent. Table 3.2.3.2 includes personal income data for the three counties in the study area.

Total personal income in Rock County grew from \$2,691,384,000 in 1992 to \$3,443,799,000 in 1997, an increase of over 27 percent. Total personal income in Jefferson County increased from \$1,240,249,000 in 1992 to \$1,601,919,000 in 1997 for an increase of over 29 percent. Total personal income in Dodge County rose from \$1,220,056,000 in 1992 to \$1,576,311,000 in 1997 for an increase of over 29 percent. These percentage increases are comparable to the State of Wisconsin increase over the same time period of slightly more than 29 percent.

<b>TABLE 3.2.3.2</b> <b>PERSONAL INCOME AND PER CAPITA PERSONAL INCOME</b> <b>FOR ROCK, JEFFERSON AND DODGE COUNTIES*</b> <i>(Wisconsin Department of Revenue, 1997)</i>						
Counties	1992 Personal Income	1997 Personal Income	Percent Change	1992 Per Capita Personal Income	1997 Per Capita Personal Income	Percent Change
Rock County	\$2,691,384	\$3,443,799	28%	\$18,837	\$22,915	22%
Jefferson County	\$1,240,249	\$1,601,919	29%	\$17,971	\$21,848	22%
Dodge County	\$1,220,056	\$1,576,311	29%	\$15,621	\$19,123	22%
Wisconsin	\$96,746,019	\$125,081,359	29%	\$19,331	\$24,048	24%

\* Data is for entire county, not just portions in the study area.

Between 1992 and 1997, per capita personal income in the three counties rose by an average of nearly 22 percent. These percentages are slightly lower than the Wisconsin increase of 24 percent during the same period.

#### 3.2.3.3 Tax Base

Residential properties, followed by commercial and manufacturing property, are the most important contributors to the tax base. Tax levies are calculated in part by using the total equalized value, or the

total value of all taxable real estate and personal property in a civil division. Table 3.2.3.3 gives equalized values by property types and total equalized values for the project area population centers.

<b>TABLE 3.2.3.3</b> <b>REAL ESTATE AND TOTAL EQUALIZED VALUES</b> <i>(Wisconsin Department of Revenue, 1999)</i>						
REAL ESTATE	City of Janesville	City of Milton	City of Fort Atkinson	City of Jefferson	Village of Johnson Creek	City of Watertown
RESIDENTIAL	\$1,743,047,000	\$151,876,100	\$344,924,700	\$185,117,200	\$32,826,800	\$569,280,000
COMMERCIAL	\$618,243,700	\$32,017,600	\$90,696,800	\$71,255,200	\$21,538,400	\$141,154,800
MANUFACTURING	\$130,589,000	\$6,723,300	\$40,351,100	\$19,731,000	\$9,520,100	\$41,797,200
AGRICULTURAL	\$2,465,800	\$527,900	\$56,800	\$633,000	\$275,300	\$1,695,600
OTHER	\$627,800	\$128,200	\$0	\$729,700	\$130,700	\$471,800
TOTAL REAL ESTATE	\$2,494,973,300	\$191,273,100	\$476,029,400	\$277,466,100	\$64,291,300	\$754,399,400
TOTAL PERSONAL PROPERTY	\$131,828,500	\$9,408,200	\$27,512,800	\$7,260,900	\$3,128,500	\$294,174,700
1998 TOTAL EQUALIZED VALUE	\$2,626,801,800	\$200,681,300	\$503,542,200	\$284,727,000	\$67,419,800	\$784,372,100
1999 TOTAL EQUALIZED VALUE	\$2,731,337,500	\$204,198,500	\$537,797,500	\$308,464,500	\$87,924,100	\$848,771,800
TOTAL CHANGE	\$104,535,700	\$3,517,200	\$34,255,300	\$23,737,500	\$20,504,300	\$64,399,700
PERCENT CHANGE	4 %	2 %	+7%	+8%	+30%	+8%

The City of Janesville has the largest tax base of any population center in the study area, followed by the cities of Watertown, Fort Atkinson, Jefferson, Milton and Johnson Creek. Although Johnson Creek has the smallest tax base in the study area, its tax base increased by 30 percent from 1998 to 1999. This is the largest increase for the study area and can be attributed primarily to the new Johnson Creek Outlet Mall situated on STH 26. The next greatest tax base increase was in the City of Jefferson, at eight percent from 1998 to 1999. The average tax base increase during this time period for municipalities in Wisconsin was also eight percent.

### 3.2.3.4 Housing

Table 3.2.3.4-1 includes the various housing types throughout the study corridor. Housing in the study area is predominantly single-family residential, with small pockets of multifamily and mobile home developments. Most of the multifamily housing is concentrated in urban areas. Typically, single-family detached dwellings are predominant in rural areas; generally, less than one percent of dwellings are single-family attached homes and less than two percent are multifamily homes. Mobile homes are nearly two times as prevalent as single-family attached homes in the study area, with similar percentages of mobile homes in both urban and rural areas.



**TABLE 3.2.3.4-1**  
**HOUSING TYPES (1990 U.S. Census)**

Civil Division	Total Dwelling Units	Single-family Detached Units	Single-family Attached Units	Multifamily Units	Mobile Homes
<b>Portions of Rock County in Study Area</b>					
Rural Areas <sup>1</sup>	5,980	5,061 (84.6%)	64 (1.1%)	207 (3.5%)	648 (10.8%)
Urban Areas <sup>2</sup>	24,687	16,060 (64.6%)	872 (3.5%)	6943 (28.1%)	794 (3.2%)
<b>TOTAL</b>	30,667	21,121 (68.9%)	936 (3.1%)	7,150 (23.3%)	1,442 (4.7%)
<b>Portions of Jefferson County in Study Area</b>					
Rural Areas <sup>3</sup>	10,214	8,485 (83.1%)	118 (1.2%)	573 (5.6%)	1,056 (10.3%)
Urban Areas <sup>4</sup>	17,588	11,402 (64.8%)	276 (1.6%)	5,199 (29.6%)	711 (4.0%)
<b>TOTAL</b>	27,802	19,887 (71.5%)	394 (1.4%)	5,772 (20.8%)	1,767 (6.4%)
<b>Portions of Dodge County in Study Area</b>					
Rural Areas <sup>5</sup>	1,867	1,483 (79.4%)	9 (0.5%)	130 (7.0%)	245 (13.1%)
Urban Areas <sup>6</sup>	921	597 (64.8%)	8 (0.9%)	207 (22.5%)	109 (11.8%)
<b>TOTAL</b>	2,788	2,080 (74.6%)	17 (0.6%)	337 (12.1%)	354 (12.7%)
<b>Rural Totals / %</b>	18,061	15,029 (24.5%)	191 (0.3%)	910 (1.5%)	1,614 (2.6%)
<b>Urban Totals / %</b>	43,196	28,059 (45.8%)	1,156 (1.9%)	12,349 (20.2%)	1,949 (3.2%)
<b>Study Area Totals / %</b>	61,257	43,088 (70.3%)	1,347 (2.2%)	13,259 (21.6%)	3,563 (5.8%)

<sup>1</sup>Includes the Towns of Fulton, Harmony, Janesville, La Prairie, Lima, Milton and Rock.

<sup>2</sup>Includes the Cities of Edgerton, Janesville, and Milton.

<sup>3</sup>Includes the Towns of Aztalan, Cold Spring, Concord, Farmington, Hebron, Ixonia, Jefferson, Koshkonong, Lake Mills, Milford, Oakland, Palmyra, Sullivan, Sumner, Waterloo, and Watertown.

<sup>4</sup>Includes the Villages of Johnson Creek, Palmyra, and Sullivan; and includes the Cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, and Watertown.

<sup>5</sup>Includes the Towns of Clyman, Hustisford, Lebanon, Lowell, and Shields.

<sup>6</sup>Includes the Villages of Clyman, Hustisford, Lowell, and Reeseville.

Table 3.2.3.4-2 illustrates household characteristics for the rural and urban areas of the study area. Nearly three quarters of all households are located in urban areas. There are generally more persons per household in rural areas, and similar numbers of people live in group quarters in both the rural and urban areas. The median value of owner-occupied housing in urban areas is over \$10,000 lower than in rural areas, and the median rent is the same throughout the study area.

### 3.2.4 Work Force

The following overview includes work force profiles of the three counties in the study area. According to the Wisconsin Department of Workforce Development, the 1997 overall labor force participation in Rock and Jefferson Counties is within the statewide range of 69.7 to 79.7 percent; labor force participation in Dodge County is greater than 79.7 percent.

The work force in all three counties depends heavily on the manufacturing sector. Nearly 50 percent of all wages earned and nearly 40 percent of all jobs in 1997 were in the manufacturing sector. This is relatively high in comparison to the statewide average. In 1997, 31 percent of all wages earned statewide were in the manufacturing sector; and, 24 percent of all jobs statewide were in the manufacturing sector.

In Rock County, the total population increased by 7.4 percent from 1990 to 1997 while the labor force grew by 12.2 percent. From 1992 to 1997, unemployment in Rock County was highest in 1992, at the end of the recession. The recession hit Rock County especially hard because of the County's dependence on manufacturing jobs. Employment growth during much of the 1990s was centered on durable

**TABLE 3.2.3.4-2**  
**HOUSEHOLD CHARACTERISTICS**  
(1990 U.S. Census)

Civil Division	All Households	Persons Per Household	Persons in Group Quarters	Median Value of Owner-Occupied Housing	Median Contract Rent
<b>Portions of Rock County in Study Area</b>					
Rural Areas <sup>1</sup>	5,399	2.70 – 3.05	864	\$60,900 - \$83,400	\$275 - \$334
Urban Areas <sup>2</sup>	23,791	2.41 – 2.65	526	\$45,200 - \$56,000	\$255 - \$327
<b>TOTAL</b>	29,190	2.41 – 3.05	1,390	\$45,200 - \$83,400	\$255 - \$334
<b>Portions of Jefferson County in Study Area</b>					
Rural Areas <sup>3</sup>	9,034	2.54 – 3.14	1,437	\$54,200 - \$81,600	\$231 - \$504
Urban Areas <sup>4</sup>	14,653	2.51 – 2.76	1,924	\$54,600 - \$76,800	\$284 - \$317
<b>TOTAL</b>	23,687	2.51 – 3.14	3,361	\$54,200 - \$81,600	\$231 - \$504
<b>Portions of Dodge County in Study Area</b>					
Rural Areas <sup>5</sup>	1,710	2.88 – 3.28	0	\$53,800 - \$64,300	\$208 - \$353
Urban Areas <sup>6</sup>	873	2.60 – 2.73	16	\$31,800 - \$55,000	\$227 - \$288
<b>TOTAL</b>	2,583	2.60 – 3.28	16	\$31,800 - \$64,300	\$208 - \$353
Rural	16,143	2.54 – 3.14	2,301	\$65,800	\$297
Urban	39,317	2.41 – 2.73	2,466	\$54,800	\$297
<b>Study Area</b>	<b>55,460</b>	<b>2.41 – 3.28</b>	<b>4,767</b>	<b>\$60,100</b>	<b>\$297</b>

<sup>1</sup>Includes the Towns of Fulton, Harmony, Janesville, La Prairie, Lima, Milton and Rock.

<sup>2</sup>Includes the Cities of Edgerton, Janesville, and Milton.

<sup>3</sup>Includes the Towns of Aztalan, Cold Spring, Concord, Farmington, Hebron, Ixonia, Jefferson, Koshkonong, Lake Mills, Milford, Oakland, Palmyra, Sullivan, Sumner, Waterloo, and Watertown.

<sup>4</sup>Includes the Villages of Johnson Creek, Palmyra, and Sullivan; and includes the Cities of Fort Atkinson, Jefferson, Lake Mills, Waterloo, and Watertown.

<sup>5</sup>Includes the Towns of Clyman, Hustisford, Lebanon, Lowell, and Shields.

<sup>6</sup>Includes the Villages of Clyman, Hustisford, Lowell, and Reeseville.

manufacturing. In fact, from 1992 to 1997, Rock County experienced an increase in goods-producing jobs and a decrease in service-producing jobs. This is in contrast to the rest of the U.S. which generally experienced a shift from goods to service industries. Manufacturing now accounts for nearly 45 percent of all wages earned in salaried employment and dominates Rock County's economy. The largest differential between statewide wage levels and Rock County wage levels is within the finance, insurance, and real estate industry, which is relatively small in Rock County.

Population in Jefferson County increased by 8.6 percent from 1990 to 1997, while labor force participation increased only 2.6 percent. From 1992 to 1997, the number of jobs in Jefferson County increased 15.5 percent; the number of people who identify themselves as employed increased only 14.0 percent. Manufacturing is the largest industry in Jefferson County, representing 38 percent of total employment and nearly 50 percent of all wages paid.

Population in Dodge County increased by 8.9 percent in the 1990s, and the labor force increased by 21.9 percent. From 1992 to 1997, the number of jobs grew by 24.1 percent, but the number of people who identified themselves as employed grew by only 21.4 percent. During this time, the labor force increased by 18.2 percent. As of 1997, nearly 38 percent of all of Dodge County's workers were in manufacturing and roughly 48 percent of all wages were paid in the manufacturing industry. The service sector of the economy has been growing the fastest. In 1992, the service sector had 18.5 percent of all workers and by 1997, it had grown to nearly 21 percent. As of 1997, the services industry represented nearly 20 percent of all wages paid.

### **3.2.5 Community Services**

This section discusses some of the community services provided by the counties, towns, and the incorporated population centers in the STH 26 study area. Many of the incorporated population centers have delineated Urban Service Areas (USAs), and some of the towns are included in Limited USAs. Most of the population centers in the STH 26 study area offer municipal sanitary sewer, water, police, and fire service. Many of the towns do not offer sanitary sewer and water or police and fire protection service. Some of these towns are included in township sanitary sewer districts. Towns without their own police department are typically served by the County Sheriff and those without their own fire department are typically served by the fire department of a neighboring community. This section also identifies the school districts that serve children living in the South, Central and North Segment.

#### **3.2.5.1 South Segment**

The South Segment population centers of Janesville and Milton provide a full complement of municipal services to meet current community needs. Both cities have prepared plans that identify how they will meet future needs.

Because the population in the City of Janesville increased roughly 30 percent between 1960 and 1989, and its land area grew from 12 to 24 square miles (31 to 62 sq. km), the City must now provide services to a much larger and less densely populated area. Janesville is planning new growth with the use of a 20 Year Urban Service Limit. Janesville intends to plan for municipal service and facility extensions within the Limit boundary through 2019. The City has also identified Urban Reserve Areas that are beyond the urban service limits, but which might be appropriate areas for urban sewer development in the future.

The City of Milton includes approximately 3.4 square miles (8.8 sq. km) of land area. Children in the City of Milton are served by the Milton School District. The City of Milton provides sanitary sewer service within its Urban Service Area. Milton is considering significant expansion, relocation, or regionalization of wastewater treatment facilities in the near term as the current facilities are near capacity and, in some cases, over capacity. The City of Milton provides for public water supply through three active wells and two elevated water tanks. The City built a new water tower in 1997 on the south side with a capacity of 500,000 gallons. When combined with existing facilities, sufficient storage to meet the City's needs through the year 2015 is anticipated. The City's storm sewer system relies heavily on local storm drainage storage areas that have been set aside in Conservancy zoning and/or City ownership.

Children living in the towns of the South Segment are primarily served by the Milton and Janesville School Districts. The Town of Fulton offers police but not fire service; it is served by the fire departments of neighboring communities. The Town of Harmony, Town of Janesville, Town of LaPrairie, Town of Lima and Town of Rock are served by the County Sheriff and the fire departments of neighboring communities. The Town of Milton offers police and fire service to its residents.

The Town of Fulton is the only township in the South Segment that offers public water service to its residents. Portions of the Town of Fulton and the Town of Milton along Lake Koshkonong are served by the Town of Koshkonong Sanitary Sewer District. A portion of the Town of Rock is served by the Town of Beloit Sanitary Sewer District. The remainder of township land in the South Segment must be annexed into neighboring cities or villages to receive public water and sanitary sewer service.

### **3.2.5.2 Central Segment**

The Central Segment population centers of the City of Fort Atkinson, City of Jefferson, and Village of Johnson Creek have designated Urban Service Areas (USAs). At a minimum, these communities offer public sanitary sewer service, public water supply, and municipal police and fire protection services. The area is served by the Fort Atkinson, Jefferson and Johnson Creek School Districts.

The City of Fort Atkinson, City of Jefferson and Village of Johnson Creek have each recently adopted a comprehensive land use plan. The Jefferson County Agricultural Preservation and Land Use Plan refers to the growth areas around these municipalities and many others in Jefferson County as long-range urban service areas. Jefferson County has developed a set of policies with respect to annexation and extension of municipal services and facilities within long-range urban service areas in order to manage future growth.

Jefferson County has also designated limited urban service areas. Limited urban service areas currently provide or are planning to provide sanitary sewer service to unincorporated areas. Sanitary sewer service is the only “urban service” provided in limited urban service areas. Jefferson County policies to manage these areas include, for example, a policy that all development within these areas should be connected to municipal sewer systems unless the district approves an exception; and further, these areas should coordinate with surrounding municipalities to provide joint services.

Within the study area are seven sanitary districts and one lake management district that are limited urban service areas: Ixonia Sanitary District #1 (Town of Ixonia – Ixonia); Ixonia Sanitary District #2 (Town of Ixonia); Consolidated Koshkonong Sanitary District (Town of Sumner); Koshkonong Sanitary District #1 (Town of Koshkonong); Lake Mills Sanitary District (Town of Lake Mills – Rock Lake); Oakland Sanitary District #1 (Town of Oakland – Lake Ripley); Blue Spring Lake Management District (Town of Palmyra); and Sullivan Sanitary District #1 (Town of Sullivan – Rome).

Towns in the Central Segment are served by the following school districts: Edgerton, Fort Atkinson, Whitewater, Palmyra, Jefferson, Cambridge, Lake Mills, Johnson Creek, Watertown, Oconomowoc, or Waterloo.

### **3.2.5.3 North Segment**

The City of Watertown is the population center of the North Segment. Watertown residents have a full complement of municipal services including: public schools, police, fire and emergency protection, sanitary sewer, and municipal water facilities.

Although the City of Watertown has sufficient, sanitary sewer service capacity to meet its short-term growth needs, it will have to make substantial improvements in the near-term to meet new Wisconsin Department of Natural Resources (WDNR) effluent standards. The City provides high quality water through a complete system of aquifer wells, treatment plants and towers. The City has provided new municipal water supply facilities on the northeast and west sides of the City that have substantially increased the water supply in these areas.

The Village of Clyman provides municipal water and sewer, and fire service to its residents. The Village of Hustisford provides municipal sewer and water, along with fire and police services to its residents. The Village of Hustisford also provides municipal sewer service to the Town of Hustisford. The Village



of Lowell provides municipal sewer and water service and police and fire protection. The Village of Reeseville provides municipal sewer and water and fire and police protection.

The Town of Emmet does not provide municipal sanitary sewer or water service. The Town of Hustisford has a sanitary district that provides solid waste collection only; as mentioned previously, it is served with municipal sanitary sewer and treatment facilities by the Village of Hustisford. The Town of Lebanon has a sanitary district and provides municipal fire but not police service.

Children living in the cities, villages and towns of the North Segment attend schools located in the Watertown, Oconomowoc, Hustisford and Dodge school districts.

### **3.3 ENVIRONMENTAL AND RELATED FEATURES**

#### **3.3.1 Lakes, Rivers, and Streams**

The project area lies within the Rock River watershed. Surface water resources within the project area include the Rock River, Crawfish River, Allen Creek, Otter Creek, Johnson Creek, Silver Creek, Lake Koshkonong, Clear Lake, Grass Lake, Bowers Lake, and Storrs Lake (Wisconsin Conservation Dept., 1965; WDNR, 1968 and 1970).

##### **3.3.1.1 Rivers and Streams**

The Rock River is a large seep and drainage fed stream originating in Fond du Lac, Dodge, and Washington Counties. Within the project area, the Rock River extends from the City of Watertown, in the northern part of the project area, through the Cities of Jefferson and Fort Atkinson, to the City of Janesville at the southern end of the project. Bottom materials are primarily muck and silt, although rocks protrude in several areas. The water is generally turbid due to runoff from surrounding agricultural land. Common fish species include northern pike, bullhead, walleye, carp, suckers, buffalo, and a variety of forage fish. White bass, crappie, catfish, and large-mouth bass are also present in the southern part of the study area.

The WDNR lists several sites on the Rock River as “impaired” on the State’s 303(d) list. This means that the identified water bodies were not meeting the Clean Water Act Goals of “fishable and swimmable.” The only site on the 303(d) list near the STH 26 project area is the segment of the Rock River from Watertown upstream 20 miles to the Ashippun River. For this segment, the Rock River is listed as “impaired” and is ranked as a high priority waterway because of the water quality impacts to aquatic habitat, nutrients (predominantly phosphorous), and sedimentation. Discharge of treated effluent from a local cannery to Clyman Creek, a tributary to the Rock River, contributes to periods of degraded water quality.

Allen Creek is a moderate gradient stream that originates in marshland in Rock County and flows into the Rock River just downstream from Fort Atkinson. The stream bottom consists of gravel, rubble, and sand. The water is commonly clear and fertile, and the fishery is composed of primarily forage species.

Otter Creek is a warm-water, marshy stream that originates in northeastern Rock County and flows northwest into Lake Koshkonong in Jefferson County. Many of the upper reaches of the stream have been ditched, but substantial wetland areas remain. Forage fish dominate the fishery, but suckers, carp, northern pike, largemouth bass, and panfish are present in varying numbers. The portion of Otter Creek and its associated wetlands that lie near the project corridor are collectively known as Otter Creek Springs, which the WDNR Natural Heritage Inventory has identified as a natural community.

The Crawfish River is a large, shallow, moderate gradient stream. It flows into the Rock River in the City of Jefferson. The water is very turbid, may be slightly stained, and is quite fertile. The bottom is commonly composed of sand, gravel, and rubble, with silt dominating only in very slow moving reaches and backwaters. The fishery consists of northern pike, walleye, channel catfish, largemouth bass, carp, buffalo, and forage fish.

Johnson Creek is a low gradient stream that originates near the City of Watertown and flows into the Rock River near the Village of Johnson Creek. The fishery is limited to forage species. Near the mouth, the stream is adversely affected by wastewater from the Village of Johnson Creek.

Silver Creek is a small stream that flows into the Rock River at the Watertown Millpond. Its fishery consists of forage fish and carp.

### **3.3.1.2 Lakes**

Storrs Lake is a drainage-fed lake located approximately one mile (1.6 km) east of the City of Milton. The fishery consists of stocked populations of northern pike, largemouth bass, and bluegills. The lake is heavily used by waterfowl for nesting and migration.

Bowers Lake is a marshy drainage-fed lake located approximately one mile (1.6 km) east of the City of Milton. A small retention structure with a head of less than one foot (30 cm) aids in maintaining water levels. Annual winterkill precludes management of a fishery, but bullheads and forage species are usually present. The lake is managed for waterfowl, which use the lake for nesting and migration.

Clear Lake is a moderately hard spring and seepage fed natural lake located approximately one mile (1.6 km) northwest of the City of Milton. The fishery consists of northern pike, largemouth bass, bluegills, black crappies, pumpkinseeds, bullheads, and forage species.

Grass Lake is a landlocked, moderately hard, natural lake located approximately two miles (3.2 km) northwest of the City of Milton. In years of limited rainfall, the lake is practically dry. The lake is best described as a shallow to deep marsh. In wet years, the lake supports a population of fathead minnows.

Lake Koshkonong is located primarily in Jefferson County, but the southwest portion is located in Rock and Dane Counties. Historically, it was a combination of deep and shallow marshlands associated with the Rock River. Construction of the Indianford Dam on the Rock River approximately six miles (9.7 km) downstream from the marsh raised water levels approximately 3 to 4 feet (0.9 to 1.2 m), thereby producing the current lake. The bottom substrate is mostly muck, with sand on the shorelines. The lake is very eutrophic because of pollution upstream and the shallowness of the lake. The fishery consists of mainly carp, but also includes crappies, white bass, bullheads, walleye, northern pike, and catfish.

### **3.3.2 Wetlands**

Based on a review of Wisconsin Wetland Inventory maps, USDA Natural Resources Conservation Service (f.k.a. Soil Conservation Service) maps, and a field reconnaissance conducted in July 1999, the wetlands within the project area are primarily associated with the floodplains of the Rock River and its tributaries, but isolated wetlands occur throughout the project area. [Table 3.3.2](#) lists wetlands in the project area.

**TABLE 3.3.2  
WETLANDS IN THE PROJECT AREA**

Site No.	Location (See Figures 4.2.2.2, 4.2.2.3, and 4.2.2.4)		Community Type	Functional Values	Total Area	
	Alignment	Station			Acres	Hectares
South Segment						
W-1	S3	380	Wet Meadow	Low	1.0	0.4
W-2	S2, S3	470	Wet Meadow	Low-Medium	1350.0	546.3
W-3	S2, S3	550	Shallow Marsh	Low-High	13.8	5.6
W-4	S2, S3	590	Wet Meadow	Low-Medium	112.1	45.4
W-5	S2, S3	740	Floodplain Forest	Low-Medium	11.0	4.5
Central Segment						
W-6	C2, C2(a), C2(b) C3, C4	380	Wet Meadow	Low-Medium	9.9	4.0
W-7	C2, C2(a), C2(b), C3, C4	420	Sedge Meadow	Low-Medium	2.8	1.1
W-8	C2, C2(a), C2(b), C3, C4	430	Wet Meadow	Low-Medium	11.0	4.5
W-9	C3, C4	470	Wet Meadow	Low-Medium	8.3	3.4
W-10	C3, C4	480	Forested Wetland	Low-Medium	4.6	1.9
W-11	C3, C4	530	Wet Meadow	Low-Medium	61.5	24.9
W-12	C4	570	Wet Meadow	Medium-High	3300.0	1335.5
W-13	C4	610	Wet Meadow	Low	2.3	0.9
W-14	C4	620	Floodplain Forest	Low-Medium	2.3	0.9
W-15	C4	650	Wet Meadow	Low	23.0	9.3
W-16	C2	580	Wet Meadow	Low-Medium	38.5	15.6
W-17	C1	580	Wet Meadow	Low	9.2	3.7
W-18	C1	600	Wet Meadow	Low-Medium	5.2	2.1
W-19	C1	610	Floodplain Forest	Low-Medium	1.0	0.4
W-20	C2	590	Wet Meadow	Low-Medium	12.4	5.0
W-21	C3	680	Wet Meadow	Low-Medium	52.5	21.2
W-22	C1, C2, C2(a), C2(b)	710	Floodplain Forest	Medium-High	11.2	4.5
W-23	C4	740	Floodplain Forest	Medium-High	191.0	77.3
W-24	C4	810	Floodplain Forest	Medium-High	59.0	23.9
W-41	C1, C2, C2(a), C2(b), C3	840	Wet Meadow	Low-Medium	39.5	16.0
W-42	C1	490	Shrub-Carr	Low-Medium	11.0	4.5
W-43	C1	440	Wet Meadow	Low-Medium	25.0	10.1
W-45	C2(b)	547	Wet Meadow	Low-Medium	14.2	5.7
W-46	C2(b)	560	Wet Meadow	Low-Medium	9.4	3.8
North Segment						
W-25	N1, N2	190	Wet Meadow	Low-Medium	1.0	0.4
W-26	N1	260	Floodplain Forest	Low-Medium	30.3	12.3
W-27	N2	220	Wet Meadow	Low-High	8.3	3.4
W-28	N2	320	Shrub-Carr	Low-Medium	172.3	69.7
W-29	N2	370	Floodplain Forest	Low-Medium	3.1	1.3
W-30	N2	400	Wet Meadow	Low-Medium	3.7	1.5
W-31	N1	440	Wet Meadow	Low	8.8	3.6
W-33	N1	510	Wet Meadow	Low-Medium	45.5	18.4
W-34	N1	520	Wet Meadow	Low	4.0	1.6
W-36	N2	600	Wet Meadow	Low	35.3	14.3
W-37	N1	550	Wet Meadow	Low	7.6	3.1
W-38	N1, N2	690	Wet Meadow	Low	1.0	0.4
W-39	N1, N2	740	Wet Meadow	Low-High	76.0	30.8
W-40	N1	520	Wet Meadow	Low	7.0	2.8
W-44	N1	510	Wet Meadow	Low-Medium	8.3	3.4

### 3.3.2.1 Classifications

The WDNR classification system classifies the wetlands in the project area primarily as emergent /wet meadow and broad-leaved deciduous floodplain forest associated with the Rock River and its tributaries. In addition, isolated wetlands not associated with the Rock River system occur in topographically low areas throughout the project area. The U.S. Fish and Wildlife Service Classification System (Cowardin et al, 1992) defines these wetland plant communities as follows:

- Emergent/wet meadow wetlands are characterized by erect, rooted, herbaceous hydrophytic plants. The vegetation is present for most of the growing season in most years and is dominated by perennial plants.
- Broad-leaved deciduous forested wetlands are characterized by a canopy of broad-leaved deciduous trees with an understory of young trees or shrubs and an herbaceous layer.

### 3.3.2.2 Functions

Wetlands provide many important functions, including storm water retention, water quality improvement, aesthetics, recreation, shoreline protection, and habitat for wildlife. These wetland functions are defined as follows:

- Wetlands intercept runoff and store storm waters, thereby ameliorating sharp runoff peaks into slower discharges over a longer period. In this way, wetlands reduce the damage that flooding may do to stream banks, farm fields, and residences (Mitsch and Gosselink, 1986).
- Wetlands remove organic and inorganic nutrients and toxic materials from the water that flows through them by reducing the velocity of runoff entering the wetland, allowing sediments to settle. This allows wetland vegetation to take up chemicals (e.g., fertilizer or livestock waste) from the sediments before the chemicals can enter the stream. When the wetland vegetation dies, the accumulated organic material may immobilize the chemicals (Mitsch and Gosselink, 1986).
- Wetlands provide breeding and rearing grounds for fish, reptiles, and amphibians; nesting areas for birds; and forage and cover for many species of wildlife.
- Wetlands provide protection for river and stream banks by reducing wave action produced by boat traffic, wind, or currents.
- Wetlands serve as groundwater recharge and discharge locations.
- Wetlands may be a valuable resource in meeting the demand for recreational uses such as hunting, camping, canoeing, hiking, and nature study.
- Wetlands support one-third of all the State's endangered and threatened species.
- The wetlands within the project area were field verified during a site reconnaissance in 1999. As part of the verification, the WDNR form Rapid Assessment Methodology for Evaluating Wetland Functional Values was completed for each wetland area. The results of these evaluations are presented in [Table 3.3.2](#).



### 3.3.3 Floodplains

Floodplains have been delineated for the Rock River, Crawfish River and all their tributaries in the project area. The approximate location of the floodplain is shown on [Exhibits 5, 6, and 7](#). Development within the floodplain is regulated by Wisconsin Administrative Code NR 116, which is administered by the WDNR.

The floodplain shown represents the area expected to be inundated by the regional flood, which is defined as a flood determined to be representative of large flood known to have occurred in Wisconsin or which may be expected to occur on a particular stream once in every 100 years. The currently delineated boundaries of the regulated floodplain are based on Flood Insurance Rate Maps prepared by the Federal Emergency Management Agency (FEMA).

Future development that could occur within the 100-year floodplain is regulated by local city and town ordinances. For the project area, there is no significant development in the floodplain. Undeveloped wetland areas and agricultural fields dominate the land use in the 100-year floodplain.

The benefits of floodplains remaining in their natural conditions are similar to those of wetlands. These include:

- Floodwater storage, which attenuates downstream peaks, flows, and velocity.
- Long-term hydraulic stability of the channel.
- Pollution control due to reduction of velocity and deposition of pollutants and sediment.
- Wildlife and aquatic habitat for species that rely on periodic flooding.

### 3.3.4 Groundwater and Drinking Water Supply

The regional hydrogeology in the project area centers on the Platteville-Galena Aquifer and the Sandstone Aquifer. The Platteville-Galena Aquifer is widely used for domestic and farm water supply in the northern and eastern parts of the project area. The southern and western sections of the project area are supplied with water from the Sandstone Aquifer.

The Platteville-Galena Aquifer is 0 to 400 feet (0 to 122 m) thick and consists of Galena dolomite and the Decorah and Platteville Formations. The average groundwater well is approximately 130 feet (40 m) deep and yields 10 to 100 gallons (38 to 378 l) per minute. The Sandstone Aquifer is from 0 to 3,000 feet (0 to 914 m) thick and is the most widely used aquifer in the project area for high-capacity wells. In most areas, wells in this aquifer can yield 1,000 gallons (3785 l) per minute. The aquifer furnishes water to 63 municipalities and numerous industries in the Rock River drainage basin (Cotter, Hutchinson, Skinner, and Wentz, 1969).

Well construction reports from representative locations in the project area indicate that area drinking water aquifers are at depths that will not be affected by the project. For example, near the City of Milton, the majority of wells examined were completed to a depth of 50 to 107 feet (15 to 33 m) above the Platteville-Galena aquifer. Near Jefferson, most of the wells examined are completed to a depth of 75 to 300 feet (23 to 91 m) and screened in the Platteville-Galena aquifer or the Sandstone Aquifer. Near

Watertown, most of the wells examined were completed to a depth of 100 to 250 feet (30 to 76 m) and screened in the Platteville-Galena aquifer or the Sandstone aquifer.

According to the USEPA, there are no designated sole-source aquifers in the State of Wisconsin.

### 3.3.5 Upland Plant Communities

The project area is located south of the tension zone (Curtis, 1959), which separates the prairie and hardwood forest plant communities of southern Wisconsin from the hardwood forest plant communities of northern Wisconsin.

The wooded uplands in the project area consist of a mixture of dry southern hardwood and dry-mesic southern hardwood communities in the higher areas, and mesic southern hardwoods in the lower drainage areas. Most of the wooded areas consist of plots of approximately 40 acres (16 ha) or less and are isolated from other wooded areas by agricultural fields.

The dry southern hardwood community is characterized by predominantly black oak, black cherry, bur oak, northern pin oak, chinquapin oak, quaking aspen, and box elder. Less predominant species, including white oak, shagbark hickory, black walnut, and green ash are also commonly found in dry southern hardwood communities (Curtis, 1959).

The dry-mesic southern hardwood community is characterized by predominantly red oak, large-toothed aspen, red maple, basswood, sugar maple, slippery elm, white ash, and ironwood. Less predominant species, including white oak, shagbark hickory, black walnut, and green ash are also commonly found in dry-mesic southern hardwood communities (Curtis, 1959).

**TABLE 3.3.6**  
**FISH SPECIES LIKELY TO BE FOUND**  
**IN THE ROCK RIVER AND ITS TRIBUTARIES**

Rock bass ( <i>Ambloplites rupestris</i> )	Greater redhorse ( <i>Moxostoma valenciennes</i> )
Bowfin ( <i>Amia calva</i> )	Hornyhead chub ( <i>Nocomis biguttatus</i> )
American eel ( <i>Anguilla rostrata</i> )	Golden shiner ( <i>Notemigonus crysoleucas</i> )
Central stoneroller ( <i>Campostoma anomalum</i> )	Emerald shiner ( <i>Notropis atherinoides</i> )
White sucker ( <i>Catostomus commersoni</i> )	River shiner ( <i>Notropis biennius</i> )
Brook stickleback ( <i>Culaea inconstans</i> )	Common shiner ( <i>Notropis cornutus</i> )
Common carp ( <i>Cyprinus carpio</i> )	Bigmouth shiner ( <i>Notropis dorsalis</i> )
Northern pike ( <i>Esox lucius</i> )	Pugnose minnow ( <i>Notropis emiliae</i> )
Rainbow darter ( <i>Etheostoma caeruleum</i> )	Blackshin shiner ( <i>Notropis heterodon</i> )
Fantail darter ( <i>Etheostoma flabellare</i> )	Spottail shiner ( <i>Notropis hudsonius</i> )
Least darter ( <i>Etheostoma microperca</i> )	Spotfin shiner ( <i>Notropis spilopterus</i> )
Johnny darter ( <i>Etheostoma nigrum</i> )	Sand shiner ( <i>Notropis stamineus</i> )
Banded darter ( <i>Etheostoma zonale</i> )	Weed shiner ( <i>Notropis texanus</i> )
Blackstripe topminnow ( <i>Fundulus notatus</i> )	Redfin shiner ( <i>Notropis umbratilis</i> )
Brassy minnow ( <i>Hybognathes hankinsoni</i> )	Mimic shiner ( <i>Notropis volucellus</i> )
Black bullhead ( <i>Ictalurus melas</i> )	Slender madtom ( <i>Noturus exilis</i> )
Yellow bullhead ( <i>Ictalurus natalis</i> )	Stonecat ( <i>Noturus flavus</i> )
Brown bullhead ( <i>Ictalurus nebulosus</i> )	Tadpole madtom ( <i>Noturus gyrinus</i> )
Channel catfish ( <i>Ictalurus punctatus</i> )	Yellow perch ( <i>Perca flavescens</i> )
Bigmouth buffalo ( <i>Ictiobus cyprinellus</i> )	Logperch ( <i>Percina caproides</i> )
Brook silverside ( <i>Labidesthes sicculus</i> )	Blackside darter ( <i>Percina maculata</i> )
American Brook Lamprey ( <i>Lampetra appendix</i> )	Slenderhead darter ( <i>Percina phoxocephala</i> )
Longnose gar ( <i>Lepisosteus osseus</i> )	Northern redbelly dace ( <i>Phoxinus eos</i> )
Green sunfish ( <i>Lepomis cyanellus</i> )	Southern redbelly dace ( <i>Phoxinus erythrogaster</i> )
Pumpkinseed ( <i>Lepomis gibbosus</i> )	Bluntnose minnow ( <i>Pimephales notatus</i> )
Orange-spotted sunfish ( <i>Lepomis humilis</i> )	Fathead minnow ( <i>Pimephales promelas</i> )
Bluegill ( <i>Lepomis macrochirus</i> )	White crappie ( <i>Pomoxis annularis</i> )
Burbot ( <i>Lota lota</i> )	Black crappie ( <i>Pomoxis nigromaculatus</i> )
Smallmouth bass ( <i>Micropterus dolomieu</i> )	Blacknose dace ( <i>Rhinichthys atratulus</i> )
Largemouth bass ( <i>Micropterus salmoides</i> )	Creek chub ( <i>Semotilus atromaculatus</i> )
White bass ( <i>Morone chrysops</i> )	Pearl dace ( <i>Semotilus margarite</i> )
River redhorse ( <i>Moxostoma carinatum</i> )	Walleye ( <i>Stizostedion vitreum vitreum</i> )
Golden redhorse ( <i>Moxostoma erythrurum</i> )	Central mudminnow ( <i>Umbra limi</i> )
Shorthead redhorse ( <i>Moxostoma macrolepidotum</i> )	

Source: George C. Becker, 1983, Fishes of Wisconsin, University of Wisconsin Press.